

THE AMERICAN

ELEVATOR AND

GRAIN TRADE

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VOL. XLVII

431 South Dearborn Street, Chicago, Ill., April 15, 1929

NO. 10

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We want your business but we want it on a basis that will pay you as well as ourselves. We want it because we have proper facilities for handling it.

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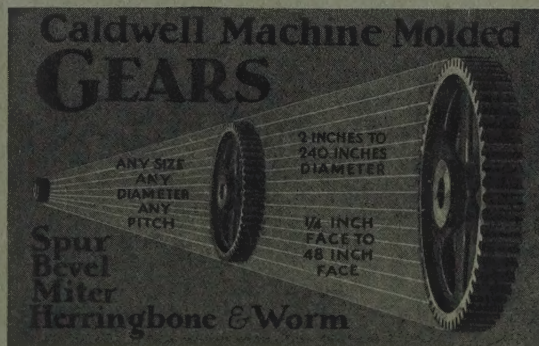


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Our long experience as a builder of elevators insures you an up-to-date house. Write today.

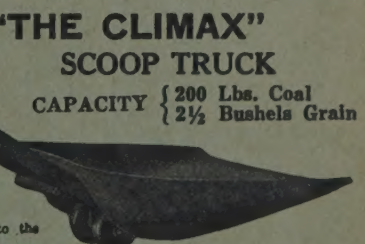
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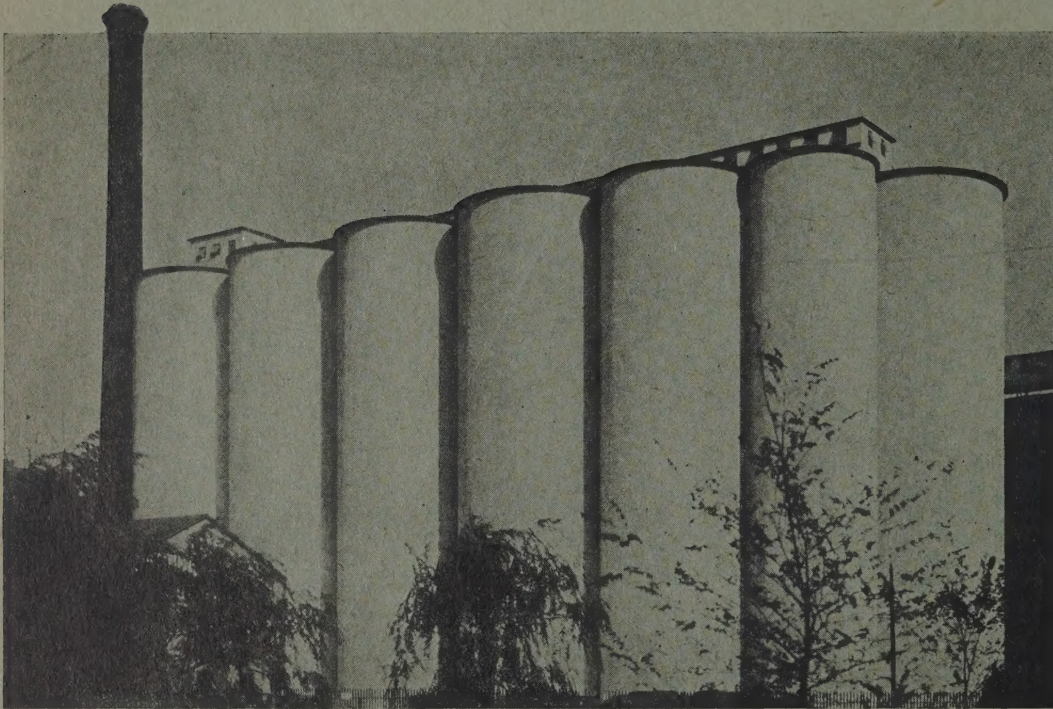
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PRICE: \$15.00 F. O. B. cars at factory
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Diamond Grain Belts

stand the test of Time



AT LEFT—1,162,000 bushel storage elevator of National Milling Co., Toledo, Ohio. Macdonald Engineering Co., Chicago, builders. 800 ft. of 30" 4-ply Diamond Grain Conveyor, 286 ft. of 26" 6-ply Diamond Grain Elevator Belt, installed June, 1927.

ALL grain belts look very much alike when they are new. Even initial tests do not tell the story.



Diamond Grain Belts stand the test that time alone can make. Special

compounding of rubber by Diamond technical men—hundreds of tests made constantly by submitting these compounds to baking heat in test ovens—results in grain belts that you *know* will live through many years of service.

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Supplies the country from these eleven service centers

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Grain Conveyor Belt

A strong yet flexible belt, designed for carrying grain horizontally. Special non-oxidizing rubber between the plies defies the deteriorating effect of time.

ELEVAY

Bucket Elevator Belt

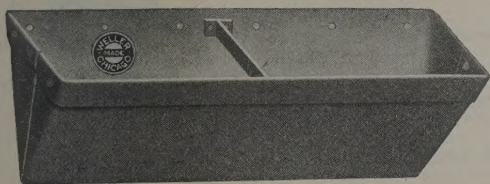
Heavier than Grainvey, duck being woven especially to withstand the weight of loaded buckets, and to prevent bolts from pulling through.

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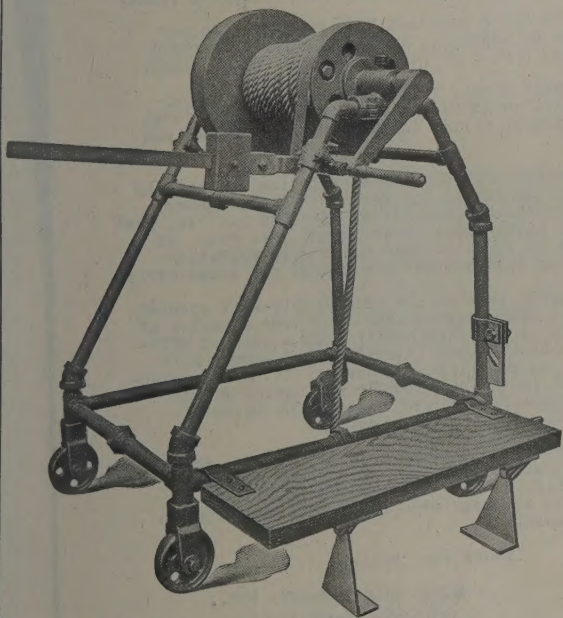
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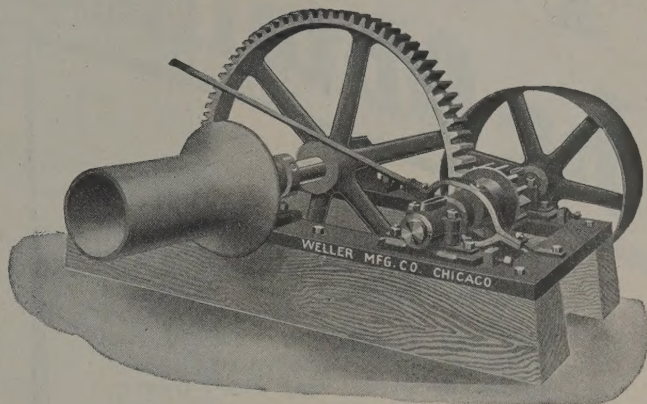
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Designed primarily for lowering men into grain bins for the purpose of repair work or cleaning bins.



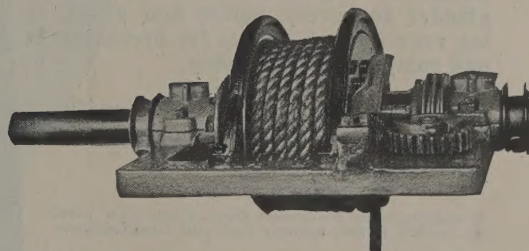
A few of the
Weller Products

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Belt Conveyors
Drag Conveyors
Mixing Conveyors
Spiral Conveyors
Bucket Elevators
Elevator Buckets
Elevator Boots
Elevator Casing
Elevator Heads
Barrel Elevators
Sack Elevators
Elevator Spouts
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Etc.



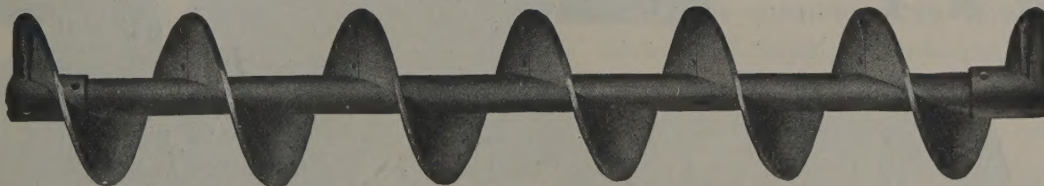
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MODEL MILL CO.



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MANUFACTURERS

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CAPACITY 300 BARRELS PER DAY

JACKSON, TENN.

Nov. 29, 1928

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Gentlemen: Attention: Mr. R.B. Leggett, Gen'l. Mgr., Secy. & Treas.

We are now using a No. 5 Standard "Jay Bee" Mill in our 300 barrel capacity plant at Jackson, Tennessee, No. 4 Standard at our Dyersbury plant, and a No. 3 at our Union City, Tenn. plant.

Before we installed "Jay Bee" Hammer Mills we were trying to pulverize our mill-run off-fall on Attrition Mills, also used several other types of so-called hammer mills, including the [redacted] and others.

At the time we did not realize just what we were losing in capacity for the power consumed, in quality of the ground product, up-keep expense and satisfactory continuous operation. Each of our "Jay Bee" mills operate on a 24-hour daily basis, year in and year out. Of course, repairs are needed at times in such continuous operation, but it is really astonishing just now few are needed for these mills.

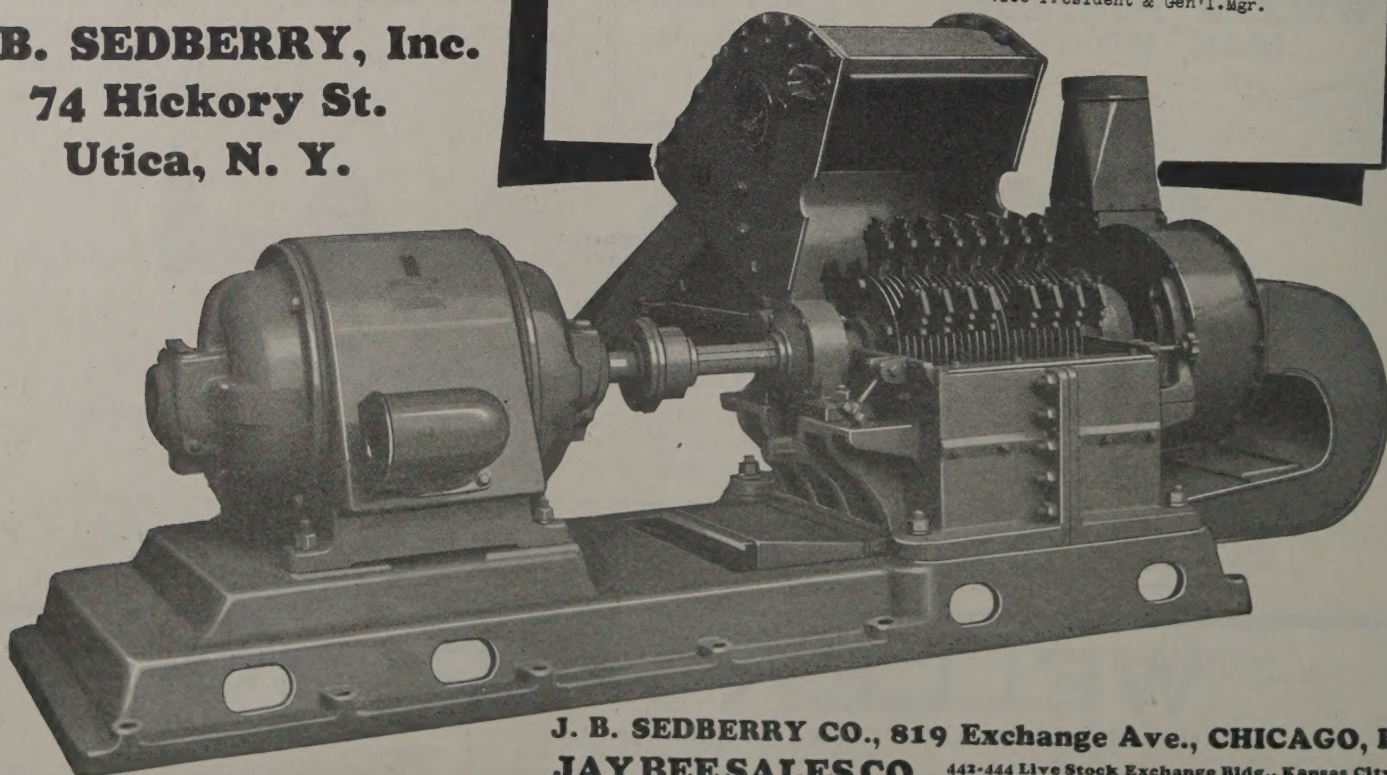
We have no hesitancy in saying that we are exceedingly well pleased with "Jay Bee" Hammer Mills after having used them over a period of some five or six years. It is our firm belief that a peak of efficiency from all angles can be obtained in a "Jay Bee" Hammer Mill far in excess of any other known grinding process. It is our understanding that the "Jay Bee" is the only hammer mill which grinds entirely in suspension without friction or heating the material. This naturally means a saving in power consumption.

While the three mills we are now operating are belt driven, as we use Crude Oil Engines in our plants, we, of course, realize that your Heavy Duty 3600 R.P. M. Direct Connected Units are considerably more efficient, and most especially in fine grinding, such as required in our plants.

Yours very truly,

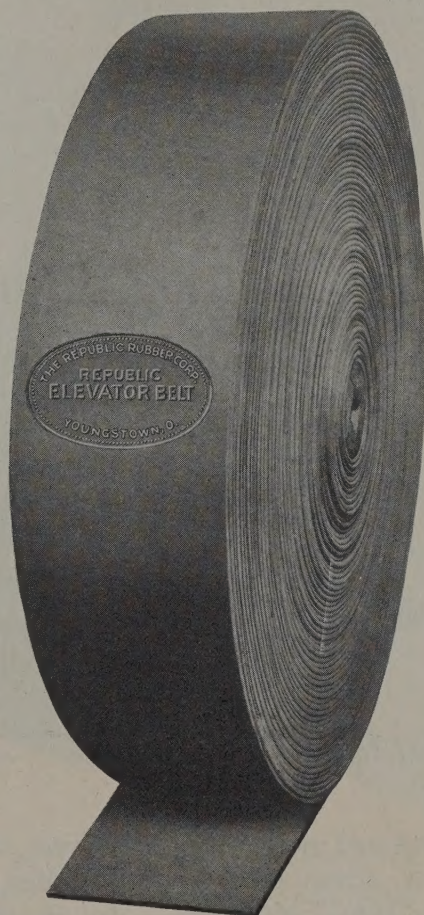
MODEL MILL COMPANY, INC.,
H. W. Monroe
Vice President & Gen'l. Mgr.

No. 377.



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JAY BEE SALES CO. 442-444 Live Stock Exchange Bldg., Kansas City, Mo.
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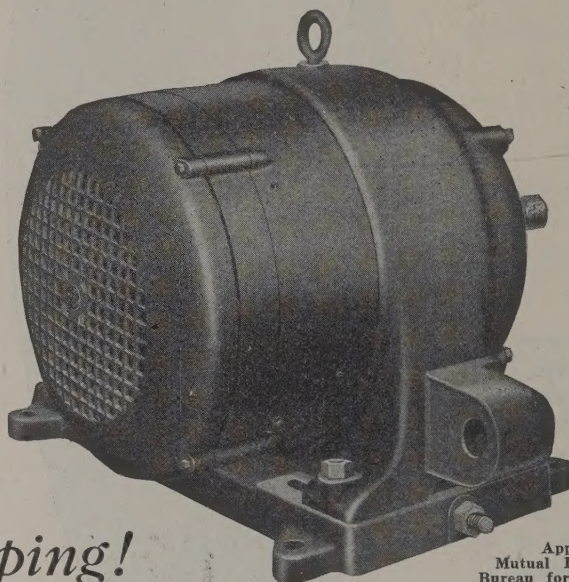


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vent piping
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No piping!

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Now you can have enclosed motor safety with open motor advantages by installing F-M Type "HAC" Motors—they are completely enclosed, self cleaning and self ventilating but in all other respects they are standard motors and can be installed as such without extra expense or trouble.

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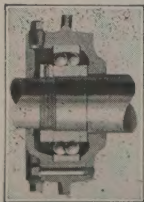
feature in F-M Type "HAC" Motors provides pre-cleaned air *without piping* for ventilating. All foreign particles are expelled and only clean air can reach the ventilating spaces.

It will pay you to investigate this new, simple and more efficient F-M Motor for your enclosed motor jobs.

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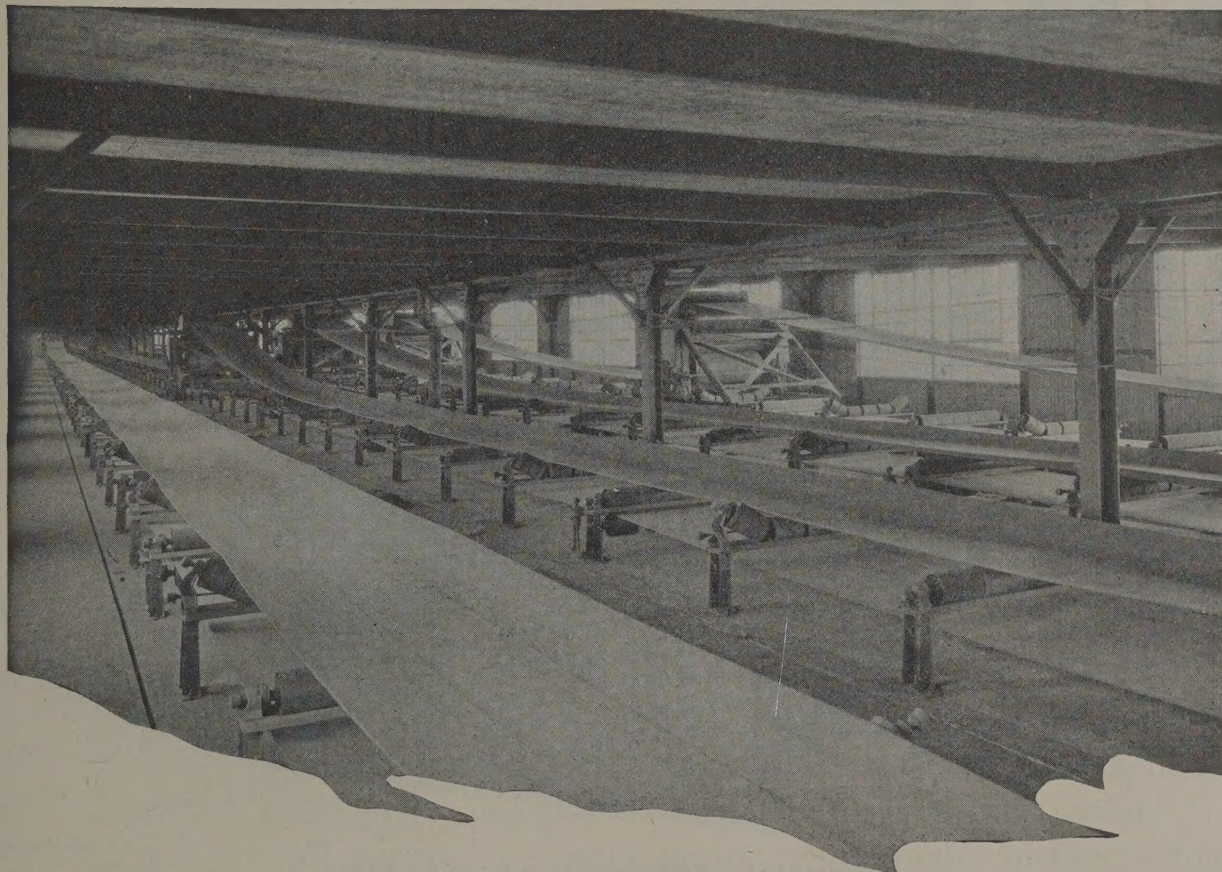
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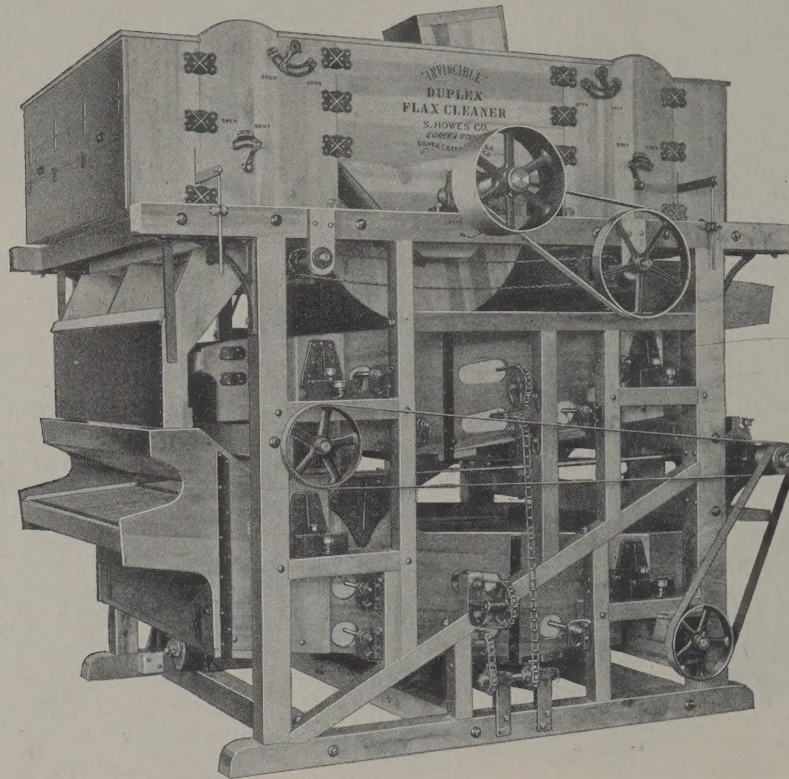
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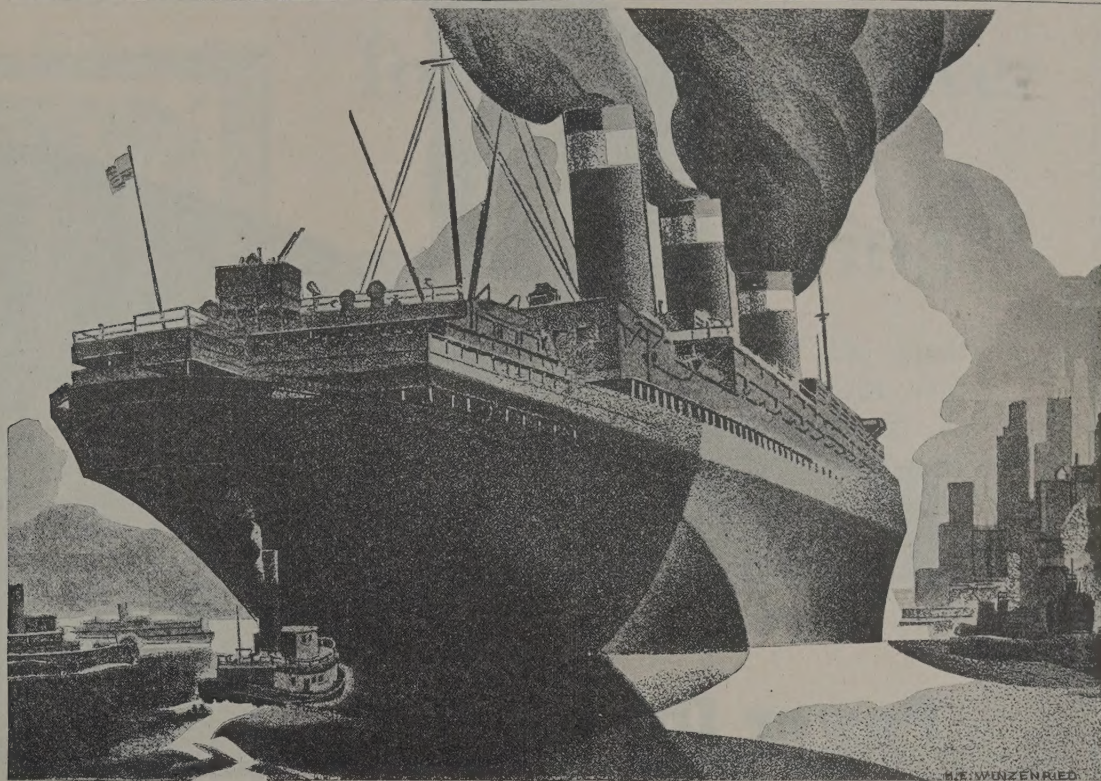
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"EUREKA" - "INVINCIBLE" GRAIN CLEANING MACHINERY





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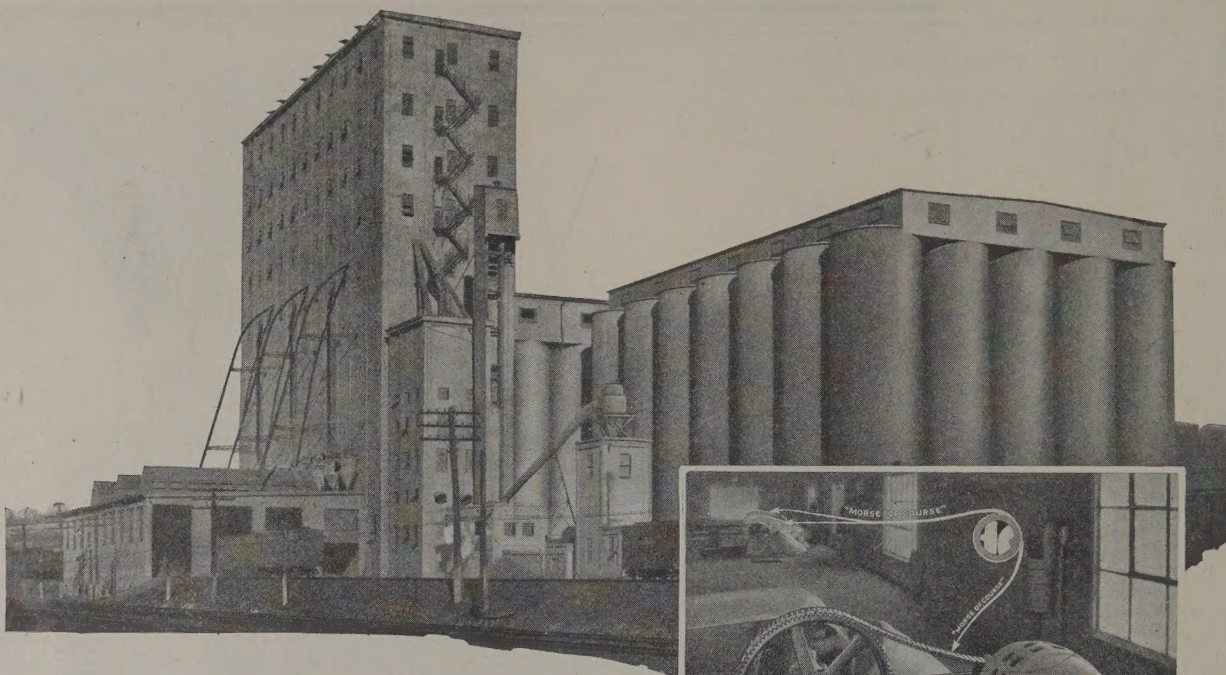
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Grain
Elevators



*Send to Department
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tions which visu-
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scope of our work.*

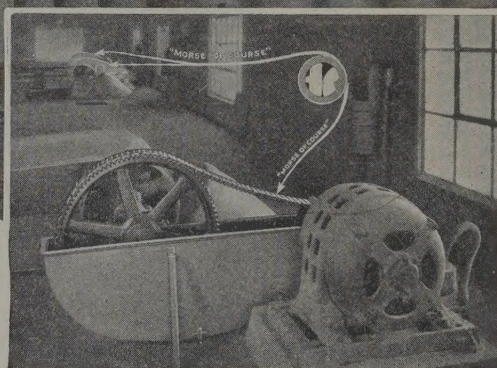


Power Drives for C. & N. W. Elevator

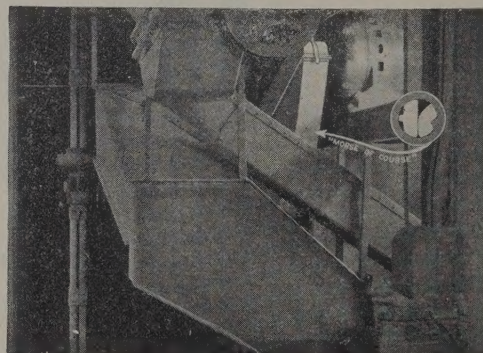
The new addition to the Chicago & Northwestern Grain Elevator at Council Bluffs, Iowa, designed and erected by Barnett & Record Co., uses Morse Silent Chains for driving the conveyors.

Many prominent grain elevators are using Morse Drives for their power transmission needs. They appreciate the advantages of 98.6% sustained efficiency, flexibility, positive speed ratios, long life.

Ask for bulletin describing and illustrating the results obtained with Morse Drives in many prominent elevators.



Three 30 H.P. Morse Silent Chains driving conveyor belts above storage tanks. Drivers, 865 r.p.m.; Driven, 140 r.p.m., 42 inch centers.



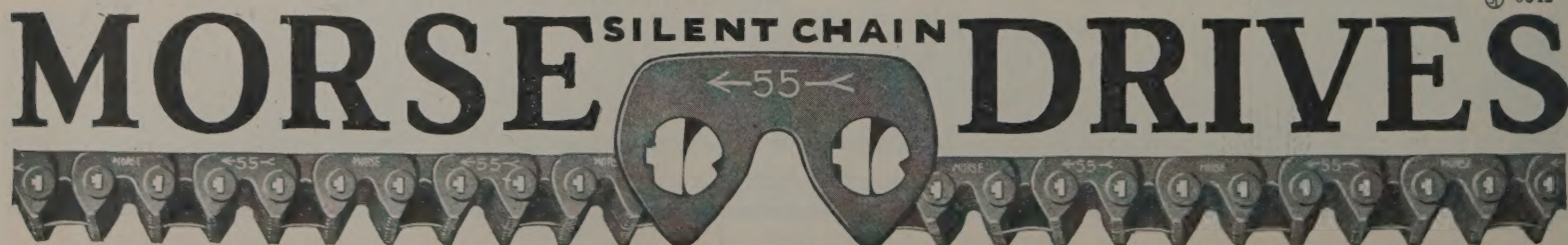
One of five 20 H.P. and 25 H.P. Morse Silent Chains driving conveyor belts below storage tanks. Drivers, 865 r.p.m.; Driven, 140 r.p.m., 47 inch centers.

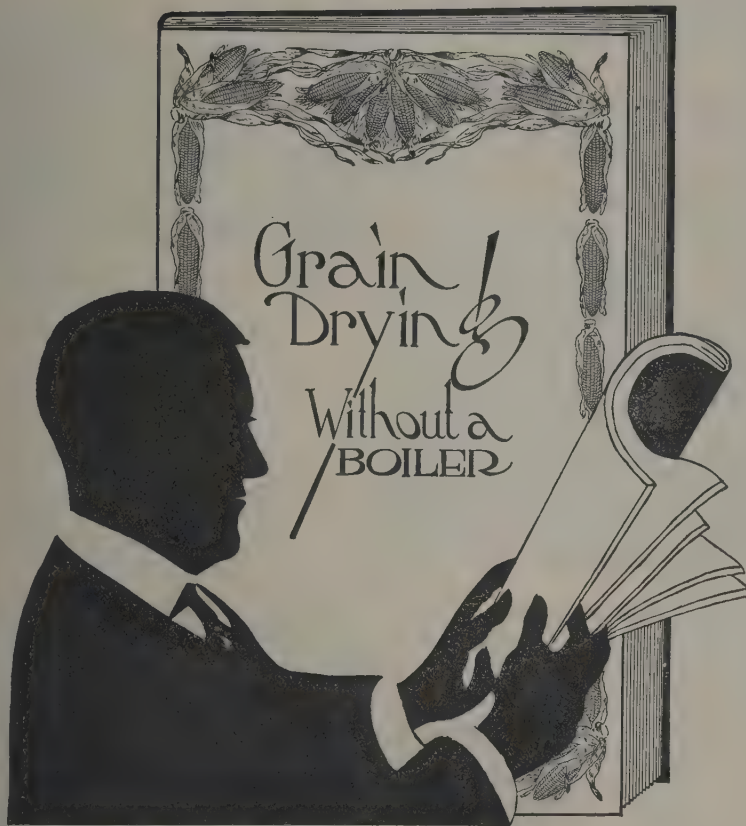
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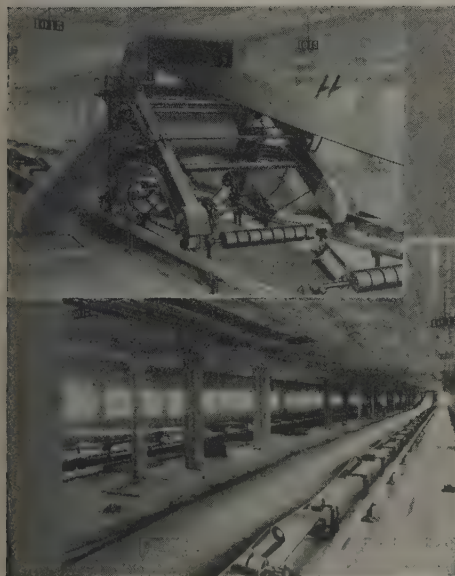
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Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



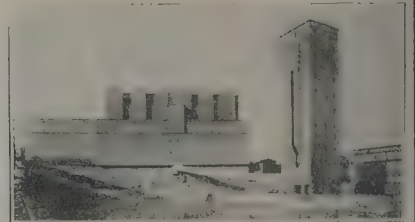
John S. Metcalf Co. Grain Elevator Engineers



Chicago & North Western Railway Elevator
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Capacity 10,000,000 Bushels
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Capacity 2,600,000 Bushels
Completed 1912



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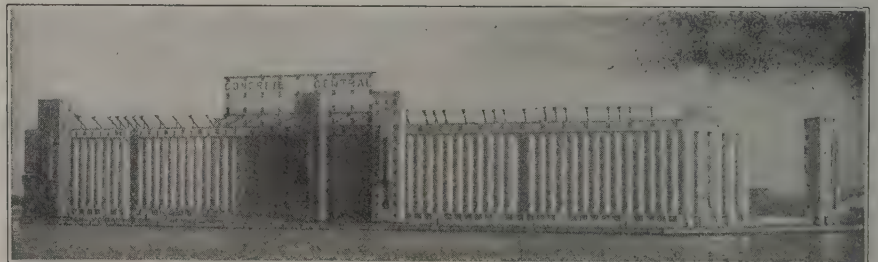


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were talked about but not generally considered practical. Today—instead of being a luxury they are a necessity, and the demand for them increases every year, but if our conditions were the same today as they were twenty-five years ago, what a life it would be.

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a desirable and necessary adjunct to every elevator having a capacity of a quarter of a million bushels or more. By installing

THE ZELENY SYSTEM

your handling facilities are made available for receiving and shipping grain rather than to determine the condition of it. Our catalog No. 6 contains a list of those who know. Write for it.

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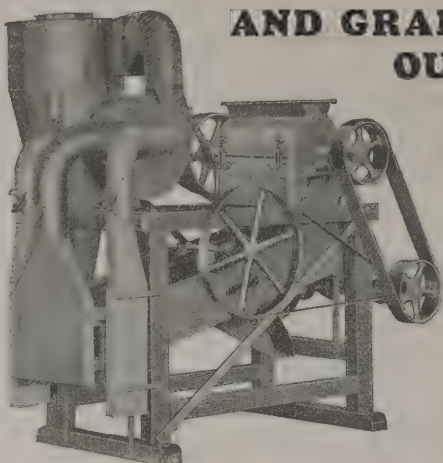
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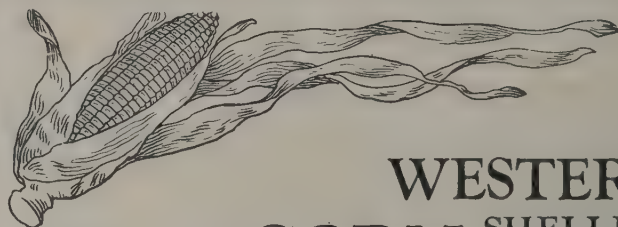
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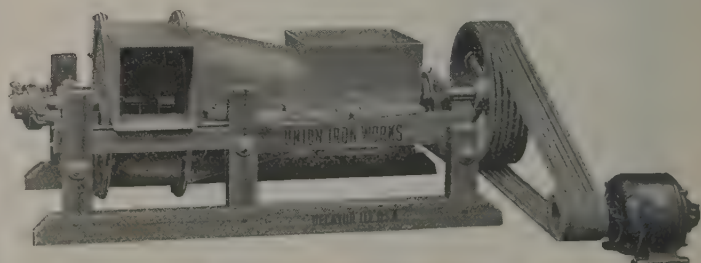
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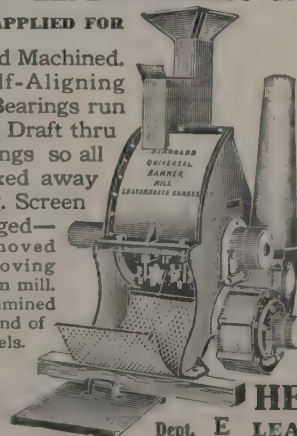
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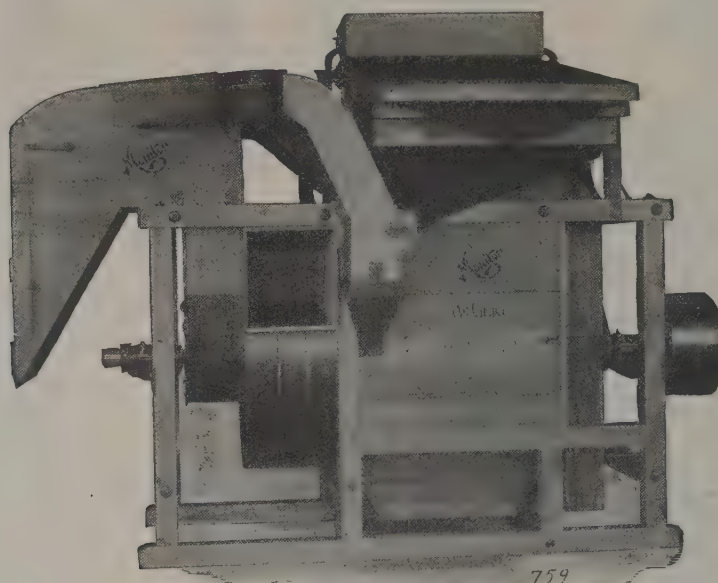
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VOL. XLVII

CHICAGO, ILLINOIS, APRIL 15, 1929

NO. 10

Shellabarger Grew Up with America

New Elevator at Salina, Kan., Is Modern as Tomorrow in Design and Equipment Making for Cost Economies

IN 1776 was begun the reality and greatness of America. Tradition and history of a new sort in an old world, were born. And in the same year the traditions of milling were begun in the new world by a family that has carried on ever since, to rise to a new greatness.

This new milling family began, as the new nation began, in the East, in Pennsylvania. Like the new nation it grew, "went west"; 1859 saw this name in milling in Illinois. In 1871 it moved on into Kansas. In 1883 it was growing, expanding with Kansas, that vast and copious bottom of the "bread basket". And it is bound up with modern American history now, a mature organization with traditions and greatness.

This, the Shellabarger Mill & Elevator Company, Salina, Kan. Now it operates 30 country elevators in western Kansas, the Shellabarger Mills and machine shops at Salina and Mid-Kansas Milling Company in Clay Center, Kan.

When great capacity mills are not in a position to intercept wheat flow towards markets, sometimes they find themselves put to the expense of shipping back unused wheat. Because of this fact 1928-29 becomes another important date to the Shellabarger Mills. For 1928 saw the construction of the 1,200,000 bushel elevator of the Shellabarger Terminal Elevator Company at Salina.

With this large new elevator, the Shellabarger mill is prepared to store the season's grain until it can be used, thus saving freight charges heretofore necessary to move the grain when no such storage facilities were available. Furthermore, when the company has little unused grain of its own, this storage elevator can earn a revenue by handling other people's grain.

On last November 2, this elevator, designed by Horner & Wyatt, consulting engineers and erected by the Macdonald Engineering Company, of Chicago, was ready for operation with 1,200,000-bushel capacity. It is constructed to permit additional units to bring the total capacity to 2,500,000 bushels. And then Al Korn, superintendent, will have his hands full.

Storage is made in 24 tanks joined in both directions in three rows of eight tanks each, also giving additional space of 14 interstice bins. The tanks are 14 feet in diameter and 110 feet deep, set on a foundation of two-slab concrete over a sub-structure of formed concrete piling driven 18 to 22 feet into the earth. Ground dimensions of this storage unit

are 48 feet, 10 inches in width by 183 feet long.

These tanks are separated from the headhouse by a 15-foot space, bridged at the top and connected with tunnels at the bottom. On the ground above the tunnels is sandwiched the office building and storeroom.

A nine-foot cupola houses two 36-inch belt conveyors distributing grain to the tanks through Webster Trippers. Two 30-inch belt conveyors under the tanks carry discharge into the headhouse basement. Power is by 20-horsepower electric motors.

Storage is divided into 100,000 bushels in the headhouse and the balance in the tanks and inter-

into either of two or into both legs is arranged.

On the opposite side is the third leg for shipping, and also room for a fourth leg when it may be needed. The legs are driven by 75-horsepower motors with transmission through double reduction gears and Link Belt Drives. Leg loads are indicated constantly by ammeters.

Two concrete garners of 2,500 bushel capacity are at the top of the house, and lead to Fairbanks Hopper Scales of like capacity. The garners are arranged to receive discharges from all elevator legs. An arrangement of by-pass valves, however, will permit leg discharges to go directly to the spouting floor.

By combining eight of the 22 headhouse bins in the middle, space is provided for a 15 foot cleaner floor. Cleaning capacity in two Huntley Separators is 6,000 bushels per hour divided between a 5,000-bushel Monitor Elevator Separator and a 1,500-bushel scourer. All of the bins in the headhouse have a capacity of 2,000 bushels or more.

Permanent spouts (overhead) to 11 bins afford connections with two stationary mixing hoppers on the work floor. Mixing is further facilitated by a system of valves permitting accurate blending. Below the work floor the two mixing hoppers are spouted to allow either separate or joint operation. By this system blending from any of the bins in the headhouse is possible.

The mechanical equipment presents a layout of nice engineering practice and economy. In all, 17 motors, with a total horsepower of 550, are used. Direct connection is employed in the drives.

The five belt conveyors have a total length of approximately 186 feet. All are 36 inches in width, a standardization practice that is always of considerable ultimate economy.

Miscellaneous equipment consists of a disc separator and a Webster Car Puller. The motor on the puller is controlled by an automatic compensator, with push buttons placed on each track. A lever arrangement allows for use on any of the spurs. There is also a complete dust-collecting system, arranged in two units, which take the dust from the belt conveyor loaders, discharge heads and from floor sweeps. They discharge to an outside metal bin.

Save for the electric motors, the machinery, metal work, all spouting, and belting were furnished by the Webster Manufacturing Company of Chicago. Electric terminals on the bin floor and



SHELLABARGER TERMINAL ELEVATOR AT SALINA, KAN.

stice bins. Two legs are capable of receiving 10,000 bushels each per hour, and one leg can ship 10,000 bushels per hour.

The detail of the headhouse, a structure 201 feet 4 inches high on a ground plan 42x44 feet, is thoroughly worked out, from a full size basement 21 feet 2 inches deep to the top. Two railroad tracks on one side are used chiefly for unloading, and a third track on the other side serves for loading. Grain is received directly into the elevator from cars through sinks located on the two unloading tracks. From the sink the grain passes to the basement on 36-inch belt conveyors where discharge

wire conduits have been provided so that the Zeleny Thermometer System can be installed at a later date.

The Shellabarger Terminal Elevator Company was organized in May, 1928, two months after plans for their elevator had been created. The owners and officers are those of the Shellabarger Mills.

The memorable dates in the history of Shellabarger Mills parallel closely memorable dates in the history of the country with which it grew:

1772: One Martin Schallenberg came from his native home Schallenberg (Echoing Mountain) in Switzerland. To make the pronunciation of his name easier to his adopted countrymen, he changed his name to that spelling with which America is now familiar.

1776: Shellabarger established his first mill, a water power one, on the bank of the Conedogwinet Creek, near Newville, Penn. The traditional "miller's toll" of ground grain was his source of income.

1831: Isaac and John Shellabarger, grandsons of Martin, acquired a second water power mill, in Newville, Penn. Wealth and reputation were grow-

ing. And the miller's house at this second mill still stands.

1859: "Westward Ho." The third Shellabarger mill was acquired in Decatur, Ill., first by a third interest, then completely. In 1860 this mill was destroyed by fire, but the Shellabargers quickly rebuilt it.

1863: A mark of progress. The first Illinois mill was sold and investment in a larger plant, the Great Western Mill, was made. (The Shellabargers sold this plant in 1902 to the American Hominy Company.)

1871: D. S. Shellabarger, who had undertaken the Decatur mill venture earlier in his life, this year undertook with his brother, Joseph, a mill in Topeka, Kan. Joseph Shellabarger bought this from his brother.

1883: D. S. Shellabarger purchased the Salina mill to protect his other Kansas interests. It used stone burrs for grinding. But in 1895 Fred Shellabarger, son of D. S., was put in charge of it and remodeled it into a new-style roller mill.

So has the spirit of 1776 and tradition of 150 years become those of 1929.

tificate. In case the farmer wishes to store his grain, as is very often the case in the Spring wheat area, he receives his check for protein premium as soon as possible after delivery of the grain and he is later paid only the base price prevailing at the time he decides to sell his wheat.

In general, this plan has proved to be uniformly satisfactory. Wherever adopted it has reduced the amount of direct shipping materially and brought about much greater satisfaction on the part of farmer patrons. Furthermore, general adoption of such a plan by elevators in a given locality has practically eliminated the practice that had developed, whereby farmers hauled their wheat to distant towns in order to deliver it at a station which was paying a high average premium. In a broad way the plan is helping to solve the protein problem and its adoption is becoming general.

INITIAL PROTEIN SURVEY NEEDED

Still there are a number of factors and precautions which affect the working of the plan which should be presented here. In the first place, managers have found it helpful to a knowledge of proper binning of their grain, to make a survey of the protein content of the wheat in their area as soon as it is matured. This information together with the appearance of the grain when delivered assists the manager in preventing the mixing of high protein wheat with low protein wheat, thus causing a loss in premium values.

In the second place, great care should be taken to see that a fair, representative sample of each farmer's wheat is obtained. Such samples should immediately be placed in air tight containers to avoid drying out of the moisture to a lower content than that contained in the main bulk of the grain upon reaching the terminal markets. Protein tests are made and percentages reported upon the basis of the moisture content of the samples as received. A dried out sample of identical wheat will show a higher protein percentage than a sample in which the original moisture has been retained. Consequently, unless samples taken by the local elevator are kept and mailed in moisture proof containers, the tests received on these samples will show a higher test than will be shown on the carloads shipped to terminals. Accordingly, farmers would be paid protein premiums based upon higher protein wheat than the elevator is able to sell at the terminals.

SAFETY FIRST

Again it has been found that it is hardly safe for a local elevator to attempt to reflect every possible penny of premium value indicated by the protein test on a farmer's wheat. Losses are often taken both by errors in mixing high and low protein wheat and by market changes in premium values between the time the grain is purchased from farmers and delivered to terminals. However, it is possible to reflect 75 to 80 per cent of the full premium value. This has proved generally satisfactory to farmer patrons, especially in the case of farmers' co-operative elevators where such portions of premium values as are retained and not needed are returned to the grower in some form of dividend.

In addition to observing these precautions there are a few steps which might be taken by various agencies to aid in the solution of the protein problem. In a number of localities in both spring and winter wheat areas there is need for additional protein testing facilities where tests may be obtained more quickly than at present. Second, there is need for greater uniformity and accuracy in protein testing methods of laboratories operating in both areas. Third, there is a need in some markets for dealers to recognize possible technical errors in protein testing of at least 25 per cent and allow for them in considering premium value changes.

In conclusion it may be said that the problem of accurately reflecting protein premiums to growers by farmers' elevators is being fairly satisfactorily handled by a considerable number of such local associations, especially in the Spring wheat area, and by certain wheat pooling associations.

Accurate Reflection of Protein Premiums to Growers By Farmers' Elevators*

By W. J. KUHRT

Senior Agricultural Economist, United States Department of Agriculture

THE protein content of Hard Red Spring and Hard Red Winter wheat, because of the demands of millers and bakers, has become a very important factor in determining both the quality and the consequent market value of these classes of wheat. Quality factors other than protein are, of course, included in the Federal grades or standards but, thus far, it has not been found feasible to include protein content as a grading factor.

However, variations in value of wheat, due to differences in protein content, are at this time accounted for, in most terminal markets, by a system of premiums over or discounts under grade prices. In this way, substantial premiums for high protein wheat are often received by local dealers, farmers and others who, because of sufficient volume, are able to ship in carload lots directly to terminal markets. Since organization, also, certain of the wheat pooling associations have accounted for variations in protein content and premium value of wheat delivered by their members by setting up a schedule of protein premium differentials which are used in computing the price returns to members. In this way each member received at least the major portion of the premium value which his wheat brought.

But only a small proportion of the Hard Spring and Hard Winter wheat crop marketed through farmers' organizations is shipped by farmers directly or handled by grain pooling associations, the bulk being handled in comparatively small lots through local farmers' elevators operating independently or affiliated with farmer-owned commission agencies. These local elevators received at times premiums for the high protein wheat which they sell, but they have not, in general, reflected back these premiums to their patrons in a manner commensurate with the protein content and premium value to which these growers were individually entitled. Instead, practically all farmers' elevators during the past few years have been endeavoring to reflect these protein premiums to growers on the basis of the average content and premium value of all wheat delivered to their respective elevators. This method has been fairly suitable for localities in which protein content does not vary materially, or in seasons when protein content is uniform or premium values are

low. In general, however, this plan has not proved satisfactory because of the wide variation in the protein content and consequent premium value of wheats grown by different farmers delivering to a given station.

Research studies have shown that variations of several per cent in protein content may occur not only between the crops grown in two seasons, but also between sections in the same area and between the wheats grown on different farms or in different fields of the same farm. Thus there often is a considerable difference in the premium value of wheat grown by farmers at a given station which, if sold to the local elevator on the basis of the station average, would penalize the producer of high protein wheat.

However, the dissatisfaction of farmers with this method and their tendency, wherever possible, to ship their wheat directly to terminals has caused local elevators to give considerable thought to the matter of devising more accurate methods of reflecting protein premiums to growers. In the Spring wheat area, where the proposition has been particularly acute, a number of meetings attended by farmers and local grain dealers, were held during the summer of 1928 with the result that a general plan of more accurately reflecting protein premiums to growers by local elevators was worked out. This general plan has been adopted by a very large number of local elevators in the high protein sections of that area.

This plan, in a very brief way, contemplates the taking of small end-gate samples from enough loads delivered by each farmer to obtain a representative composite sample of his wheat. These small samples are kept in an air tight container until the farmer has finished hauling. Then this composite sample is thoroughly mixed and from it two pint samples are prepared, one to be sent to a protein testing laboratory and the other retained as a check sample at the local elevator. The sample sent in for testing represents the "agreed sample" between the farmer and the local elevator.

In settling with the grower, the card price, based on non-premium wheat is paid at the time of delivery if the grower wishes to sell. Then as soon as the results of the protein test have been received, a further check is issued to the grower representing a conservative market premium value of wheat of the protein content shown on the cer-

*Address before the Kansas Co-operative Marketing School, at Manhattan, Kan., March 14, 1929.

Hyde Outlines Farm Relief Ideas For Mid-April Congress

Statement From New Secretary of Agriculture Backs Up Legislative Pledge of Hoover Administration

By ARTHUR M. HYDE

THE necessity for farm relief is no longer debatable. The discussions of that point upon every platform in the country during the last eight years have unified public opinion to a complete conviction of its necessity. The fact is frankly recognized that agriculture is not in the position of equality of other pursuits. This fact presents its own challenge to all of us that we do all we can, sanely and constructively, to reestablish for agriculture an equality of opportunity and open the way to the same standards of living that we are enjoying by industry.

It was entirely natural, and to be expected that there should be differences over that specific measure around which the great political and forensic battle has for eight years been raging. Stimulated by that battle certain principles were developed. They were largely settled by the recent election. The broad principles were set out in the party platforms submitted to the people. We have their verdict, a verdict which operates as a mandate to all of us, and which serves to chart our course for the present. The ideas laid down by the platform were positive and constructive. Broadly they proposed to attack the problem in three directions.

First, the revision of the tariff for better and greater protection of American agriculture. That subject is being dealt with elsewhere.

Second, reduction of transportation costs by development of inland waterways and highways. The advancement of this likewise lies in another quarter.

Third, the assistance of the Federal Government in reorganization of marketing systems through which the farmer may obtain a more economical and more stable outlet to the consumer. There are some other fields of assistance to agriculture which I shall mention, which also bear upon the problem.

In assisting reorganization of the marketing system we have all of us conceived the creation of a great instrumentality which we have called the Federal farm board, with advisory committees, which should be given authority and resources with which to deal with this third category of problems. And it is not one problem. It is several hundred problems. Many of these problems are unknown to us today and will only be developed with experience. The scores of different agricultural commodities, the different localities of their origin, the different markets which they penetrate, their method and means of shipment, processing and distribution, all point to the fact that we must find an agency to which each and all of the problems can be properly presented, considered, and upon which real and positive assistance can be given in solution.

We have to bear in mind that in their solution we are to a large extent blazing new trails, making our own experience as we go. And it therefore has appeared to me that as we cannot foresee in advance the circumstances under which the powers of the board are to be called into action, any attempt to write out too detailed legislative directions would probably serve only to defeat the purpose of the board. That is the heart of the plan and the rest are details.

We can perhaps get at the question of the sort of authority required if we consider the character of some of the problems and the means at hand for the administration of the remedies. I may enumerate some of these problems, that is some of the directions in which constructive assistance should be given.

WOULD GIVE MORE CASH TO CO-OPERATIVE ELEVATORS

Our farm co-operatives are in need of capital with which to acquire further facilities and to expand

their activities. The agricultural industry is in need of finance in supplement to the established financial institutions by which they will be enabled to hold their commodities until they themselves can place them in the market and not be forced to sell immediately upon completion of production. Capital is needed with which to purchase a portion of the occasional surplus or seasonal surplus and assure its orderly distribution over longer periods. The progress of many commodities from the producer to the consumer is most disorderly and wasteful; and especially in perishables, the terminal markets are flooded in one week and starved in the next. The result is undue fluctuation in the price and waste of the commodity itself. An enormous amount of unnecessary transportation takes place in the cross hauling of commodities in search of immediate market. There is great hardship upon the consumer, for with some perishables, the price



Underwood & Underwood
SECRETARY OF AGRICULTURE ARTHUR M. HYDE

is almost doubled after the arrival of these commodities in terminal markets because of inadequate and wasteful terminal distribution.

There are a minority of dealers and shippers of farm commodities, particularly in the perishables, whose business practices are unfair and a great hardship upon the producer.

There is an entirely inadequate grading and standardizing of certain commodities, with the result of uncertainty in prices and opportunity for advantage to be taken over the producer and for speculation against the consumer. There is an inadequate development of processing for disposal of occasional surpluses of many commodities into by-products. There are, in fact, great wastes in the whole chain of distribution which are a tax on both the producer and the consumer. Our warehouse acts need amendment in order to facilitate more perfect action in the establishment of credit.

We have need for some agency to pass upon the inauguration of further irrigation and reclamation projects so as to prevent increased production until such production is required for national purposes. We have need for a larger study and for action in the determination of better use of marginal lands and their devotion to either forestry or pasturage. We have need for a better understanding of the national requirements of each commodity from season to season, and more active instruction of the farmers as to the volume of production required.

When we come to the question of agencies that the farm board should rely upon in the solution of these questions, we have at hand the large

growth and the great experience of our co-operative marketing associations. They have already been organized by the farmers, they are farmer-controlled and farmer-owned. And in speaking of them I am not confining myself to the co-operative organizations as defined by the Capper-Volstead Act but I include the farmer owned elevators, the clearing houses, the farmer pools, they are all in essence farmer co-operatives. Such organizations have pioneered the way under great difficulties, have educated a large group of farmers in the problems of marketing, developed sense and stability in organization and management. We should take no action which would tend to supplant them or undermine their growth. It is largely upon these organizations that we should build the foundations of the collective action of the farmer. And such action will be the more consonant with American life. We want to build up the farmers themselves to control their products, not to build up bureaucracy.

CITES OVER-PRODUCTION DANGER

It would seem to me desirable that the board, armed with resources and authority, could best work out these problems by receiving proposals from the various farmers marketing associations. These proposals in many instances, particularly in handling stabilization questions or handling of facilities can well take the form of corporations created by these associations and owned and managed by them, and aided with capital from the board under such restrictions as the board should be authorized to apply. Of these restrictions it would seem to me desirable to insist that no operations should be supported which would stimulate increased production because by adding to a surplus we would defeat all relief.

Let me repeat that there is little in the way of accumulated experience to guide the board. It must make its own history, and guide each succeeding step it takes by the experience gained from the last. The mere enumeration of a few questions it must face is sufficient to show that there are many others that cannot be foreseen. All of which argues, to my mind, that if we are to create an instrumentality to which distressed agriculture can take its problems, that instrumentality must be clothed with broad and general authority.

GRAIN INSPECTION SCHOOLS IN KANSAS THIS MONTH

Grain inspection schools will be held under the general direction of the Kansas State Agricultural College, in the state grain inspection laboratories at Dodge City, April 22, Great Bend, April 23, Hutchinson, April 24; Wichita, April 25, and Salina, April 26. The Kansas Grain Dealers Association, the Southwest Co-operative Wheat Growers Association, and the Farmers Elevator Co-operative Association are also joining in making arrangements for these schools.

Instruction will be given in the grading of grain under the Federal standards, samples being graded in the usual way at these grain inspection laboratories. The Federal standards will be discussed, as well as various inspection problems affecting country grain merchants. Representatives of the United States Department of Agriculture will be present to demonstrate inspection methods and discuss the official interpretations of such grading factors as odor, total damage and heat damage. A better understanding of the Federal grain standards and a more uniform grading of grain at country points will enable producers to get a better price for grain of superior quality. A working knowledge of the standards will assist grain producers and dealers in harvesting and handling grain in such a way as to prevent spoilage and to obtain better grades in the terminal markets.

Persons interested in attending these schools should write the Extension Division of the Kansas State Agricultural College for additional information and application blanks.

ROSAFE is generally considered the best South American wheat.

GREAT LAKES GRAIN COMMERCE BROKE ALL RECORDS IN 1928

By ELMER M. HILL

Some interesting figures showing the tremendous amount of grain moved down the Great Lakes last year are included in the annual report of the Lake Carriers' Association, an organization of shipping interests which maintains a statistical department to record the movement of traffic up and down the lakes from the head of Lake Superior to Buffalo.

Although the lake traffic of 1927 was noteworthy because of the establishment of 18 new records, last season was the greatest record breaking year in the history of Great Lakes commerce. During 1928 all but one of the 1927 records were shattered and 14 additional records were made.

The new grain records are reported by the Lake Carriers' Association as follows:

Season's largest traffic in bulk freight, including grain, 127,329,348 net tons. Best previous record was in 1926 when 121,289,502 net tons were carried.

Largest cargo of wheat was carried by the steamer *Memoyne*, August 13, 1928, when she brought down 555,000 bushels, equivalent to 16,650 net tons. Previous record made by the same steamer was in 1926 when she carried 518,000 bushels of wheat.

Largest cargo of wheat by vessel of United States registry was carried by the steamer, *Harry Coulby*, November 22, 1928, when it loaded 503,282 bushels. Best previous record was in 1927 when the same steamer carried 492,000 bushels.

Largest mixed cargo of grain was carried by the steamer *Lemoine*, September 10, 1928, when she brought down 235,333 bushels of wheat and 360,188 bushels of barley, a total of 595,521 bushels which is equivalent to 15,699 net tons. The best previous record was made in 1926 by the same steamer when she carried 551,000 bushels of barley, rye and wheat.

Largest ton movement of grain was made by the steamer *Lemoine*, November 13, 1928, when she carried 407,654 bushels of wheat and 158,515 bushels of flax, a total of 566,169 bushels, equivalent to 16,668 net tons.

Season's largest grain shipments was 575,746,382 bushels as compared with 543,647,556 made in 1924.

Season's largest wheat shipments was 415,510,713 bushels as compared with 355,706,051 bushels in 1927.

Season's largest barley shipments, 68,743,187 bushels as compared with 48,854,000 bushels in 1927.

Season's largest shipments of Lake Superior grain, 533,307,869 bushels as compared with 450,197,396 bushels in 1924.

Season's total grain shipments through the Sault Ste. Marie canals, 537,799,015 bushels as compared with 455,199,513 bushels in 1924.

Season's total wheat shipments through the Sault Ste. Marie canals, 406,759,712 bushels as compared with 330,898,155 bushels in 1927.

Largest shipment of wheat through the Sault Ste. Marie canals in a single month, 108,472,747 bushels in November as compared with 93,237,189 bushels in November 1927.

Season's grain shipments through the Welland canal connecting lakes Erie and Ontario (the Canadian route), 190,020,122 bushels as compared with 177,594,782 bushels in 1927.

Season's grain shipments to Montreal and the St. Lawrence river, 182,676,605 bushels as compared with 170,872,527 bushels in 1927.

SELL AT MARKET, CROWTHER'S ADVICE TO CO-OPS

Samuel Crowther declares the whole custom of buying on averages is not against the interests of farmers. The inexpert farmers, whose products will grade below the average, find themselves distinctly better off in the present system than they would be in any system which gave them their just desserts.

"That," he says, in the *Country Gentleman*, "is why any co-operative which strives to get all the producers of a commodity into its membership is bound to have trouble, for it will find that a con-

siderable portion of its members are getting what they least want—a square deal. Thus large pools always cause dissatisfaction quite apart from the delay in making settlement for them, and regardless of whether the average price obtained has been favorable or otherwise.

"The delay in settlement is of itself a serious factor. The cash buyer settles the transaction at once, but the pooling co-operative must delay final settlement until it has sold the whole pool—unless it has a fund which can take the risk of estimating a settlement. It may afford interim borrowing facilities, but this is expensive and also it is expensive for the members to be without their money for so long."

SUPPLY STORE 50 YEARS

By FELIX J. KOCH

It is the year 1879. You have done the family shopping in Cincinnati and are hurrying the team up through Brighton, northwest, toward home. But in Brighton you swing the team off the turnpike, halting before Jacobs' Feed Store.

You intend to make some purchases in this friendly new store of Harold D. Jacobs, some salt and a sack of feed. Already it is a meeting place. There is a great deal of conversation about the chances of state obligations ever being redeemed. Men didn't see how 200 millions or more could ever be redeemed. Someone was always bringing up the question of states' rights, or honor, or



YOU'D HITCH THE TEAM TO AN ELECTRIC LIGHT POST

merely saying what a mess public finances were anyhow. Finally you made your purchases and left.

As the years drifted into the '30s Jacobs' absurd front entrance with the big display window on one side and the small window on the other were familiar trappings of your habit of stopping here. In 1884 the close Cleveland-Blaine vote was the most exciting thing of the year. Very often you felt like knocking a man down for his sentiments—and yours. Sometimes you'd end an argument so passionately that the yawning front door would rattle a wooden tune out of the prim, inelegant row of four windows on the second floor when you slammed it, slamming for Cleveland or Blaine.

All the while no one begrudged the tidy sum Jacobs was making out of your chatty purchases. And when the father sold out to the son in '88, you went right on trading. Later on, others were waited on by one of the second Jacobs' two sons.

It is the year 1929. Three years ago the two sons of the second Jacobs took over the business. With some pride, for they sense a tradition, the exterior is kept as it always was. Inside the historical sense is not lost because of incandescents, telephones, modern office equipment, because it is in an old setting for all of that. Perhaps you drive up in the car, but if a man of '79 came down the highway, he'd not be lost, though the team would be hitched to an electric light post in the new manner.

It would be well nigh impossible to find another store that looks like this. Visit it, and you'll be led first through its glossy interior to a little

office, the door of which is made up of glass panes, through which the drive may be seen. The walls are light green finished wood, popular two decades ago in school finishing. There is a clerk's desk, adapted to the traditional bookkeeper's methods, and the system of drawers where records were kept before less spacy card index files were devised.

Customers cannot come through the passageway without noting a shelf of specialties, whereupon they add themselves to their mental list of purchases. Going further back the sight of a once important sideline is seen—chimney pots, of which there are a few left from that brisk business. Near by an antique lantern depends from a wall peg, lighted now for the novelty.

But it gleams on broad feed chutes, shiny with use, that come down from the second floor. Your order of feed will still come down these chutes in the same old way.

Beyond the chutes merchandise is exhibited in the modern method, tiers of sacked goods, baled hay piled high, every cubicle convenient for instant delivery of goods. Sacks of lime, cement, grain are piled in precise array, such as one might stack coffee tins or other small pieces. Orderly built cubicles house oats and loose seed. They are painted white, as are the ceiling beams to which the piled goods rise. It is all a product of pride and wise profit. Even to the rear where is kept the shavings which are still bought by those who will bed down a horse's stall in no other way.

Fifty years old, and the only relic of its age, Jacobs' Feed Store is no antique. Time has only made it distinctive, giving its furnishings a character of charm and pride. Its mellowness betrays no decline, instead the utility of old things well kept.

APRIL-JUNE GRAIN HAULS TO BE GREATER THIS YEAR

Grain traffic by rail will be 10 per cent greater in the second quarter of 1929 than it was in the corresponding period last year, according to the forecast of the Mid-West Shippers' Advisory Board. The territory included in the estimate covers the states of Illinois, Iowa, Wisconsin, northern Michigan, and western Indiana.

Decreases in traffic volume are predicted for eight lines, including a 20 per cent decline for hay and straw, 10 per cent for flour and meal, 7 per cent for livestock, and 56 per cent in the case of fresh fruits. Averaging the expected gains and losses, the board declares the general volume of business activity in its territory will be 18 per cent greater during the April-June period this year than in the same months last year.

U. S. WANTS WHEAT BREEDERS; SALARY \$3,200 AND UP

The United States Civil Service Commission announces open competitive examinations for various positions in the Bureau of Plant Industry, Department of Agriculture. Applications must be on file by May 14, 1929.

The first exam listed is for the Federal post of associate agronomist at Redfield, S. D. Other positions open, call for duty in Washington, D. C., or in the field. Entrance salaries range from \$3,200 to \$3,700 a year. Higher salaried posts are filled through promotions.

The duties are to plan and conduct, under general supervision, extensive experiments on the improvement and genetics of cereal crops, particularly wheat, with special reference to the making of interspecific hybrids for the purpose of breeding rust-resistant varieties. Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience, and a thesis to be filed by the applicant.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city.

Hints for the Elevator Millwright

A Little Chemistry Does Much—Cockroaches Die and
Railroad Spikes Become Cold Chisels—While a
Little Imagination Makes a Conveyor

By JAMES F. HOBART

"MR. DAVIS," thoughtfully spoke Mr. Cornish one day recently, "let me tell you something. A large number of grain sacks were returned temporarily to us from a dealer and were stored in a shed at my house. A bit later they were brought to the elevator where they remained until needed for sacking a grain shipment. When the bale of them was opened, the whole bunch proved to be swarming with cockroaches, literally and realistically. What's more, when I brought the information home, my wife was transfigured into a Mexican revolution right then and there—because that was how the roaches she was finding lately in the house got there. It was clear to her now and, Mr. Davis, she seemed to indicate that either the bugs or I had to go."

"Ah! A showdown between you and the roaches," exclaimed Big Bill with utter lack of sympathy.

"Well, something's got to be done right off!" Cornish was dismal.

"I believe I can come to your rescue and rout the roaches, Mr. Cornish. Get a pound of sodium fluoride from your druggist, which ought to cost about 35 cents . . ."

"Sodium chloride! Why, that's nothing but common salt, Mr. Davis."

"Your mistake, Mr. Cornish. I said sodium fluoride—not chloride—fluoride, a different substance. Fluorine is a member of the chlorine family, but is only found in combination with other elements, in this case sodium. Salt your meat with sodium fluoride and your family will salt you away shortly afterwards. To swallow or breath it is poisonous, though it can safely be handled. The chemical composition is 93 per cent fluorine, which means death to roaches, and 7 per cent metal, or sodium.

"Sodium fluoride is soluble in water, so you may make a mixture of it and water that can be applied with brush or sprayer wherever you wish. It's so deadly to all insects that they are done with once they crawl over it. Put it down the cracks and in the corners and know you've done a good job of roach killing. I believe it is highly recommended by the Department of Agriculture as a poultry insecticide, too."

FROM RAILROAD SPIKE TO COLD CHISEL

Mr. Davis stood watching an elevator millwright chipping holes in a cast iron flange, in which the holes did not coincide with the holes in the piece to which it was to be bolted. The millwright was using a small, half-round cold chisel that was so dulled every few strikes that it had to be re-ground.

Big Bill finally could stand it no longer, said: "Why don't you harden that chisel—it's no good the way it is now? I believe I could make a better one out of a railroad spike."

"Just because this one is as hard as fire and water will make it, and because I haven't drawn the temper out a particle in dressing it," the millwright replied, "I'm going to call you on that spike claim of yours, Mr. Davis. And I'll bet you a dinner at the hotel for the eight of us here that you can't make a railroad spike chip out these holes, and I'll let you dress your spike-chisel six times in making this one hole." He chalked off a hole mark on the flange.

"I'll take you up—if Mr. Cornish here will assist in financing the dinner."

"He's good for the supper, all right," broke in Mr. Cornish, "and I'll back him . . . But I want it on this to, and on the millwright's side."

"Everybody's welcome to lose their money on it," said Davis, "and I'll back my railroad spike into a cold chisel with begged, borrowed and stolen capital."

The betting flourished. One quiet mechanic stood

up for Mr. Davis and his offer was matched. Somebody finally thought of getting a spike to proceed with.

Then Mr. Davis did two things:

He went to the drug store nearby and purchased 10 cents worth of potassium ferrocyanide. He shaped the spike and ground it to a cutting edge, leaving no metal to be removed after he had tempered it. The potassium ferrocyanide was put into a babbiting ladle and crushed into flakes. Into this he inserted the spike after he had heated it to a bright yellow. A white, suffocating smoke arose from the poisonous compound as the hot spike became coated with it.

Withdrawing the spike from the compound, Mr. Davis put it back into the fire, keeping it at about the same temperature until the coating of potassium ferrocyanide had disappeared. He performed this operation at a slightly lower temperature three more times. Then he raised the heat of the spike to a dull red, or the usual hardening temperature, and immersed it in the slacking tub.

Mr. Davis tested his product with a file, which slid over the spike point as if it were greased. He gave his tool a slight grinding, not quite to a cutting edge, and walked over to the flange. For a moment he was impressive, then he grasped the hammer, aimed his cold chisel and chipped out one hole, then another without dressing the late railroad spike. Everybody thought, "perfect," and asked how he did it.

Big Bill explained that the spike steel probably contained about 3/10 of 1 per cent carbon, or about the same amount as the millwright's cold chisel that failed. He said that he had treated the spike end until it contained about 8/10 to 9/10 of one per cent of carbon, or, in other words, until the carbon content was increased from 30 to 80 or 90 points, thus hardening the steel.

This, he pointed out, enabled him to case harden the spike, an operation he would have to do over again as soon as several dressings on the emery wheel had worn off the "case" of hardened steel. The potassium ferrocyanide immersion is only one of the potassium salts that will permit steel to unite with carbon to case harden it, but Mr. Davis liked it the best.

"You can case harden with caustic potash, which is used in making certain soaps, and possibly with Red Seal Lye," he explained. "You might even put a thin surface on steel with a soap with a high potash content though it would be a long drawn out process."

Big Bill ate out that night, the guest of Mr. Cornish and the millwright.

MAKING SCREW CONVEYOR FLIGHTS

"What is going to happen to that piece of conveyor?" queried Mr. Davis of Mr. Cornish as two men came out of the elevator lugging a length of screw conveyor.

"Reckon I will have to wish it on the junk man," replied Mr. Cornish. "A couple of the flights are broken and we are putting a new piece in place of the old broken one."

"Why don't you send that piece of conveyor to a machine shop or to a good blacksmith, and have a new flight made and put in place of the broken one?"

"Just for this reason, Mr. Davis, there is not a mechanic in this neighborhood who can lay out a screw conveyor flight and have it come anywhere near a fit after it has been bent to supposed shape!"

"Such flights are hard to lay out, and but very few can do the trick and have the flight fit after it has been cut out from the pattern laid out by the draftsman. But, Mr. Cornish, here is a scheme which will let your own mechanics mend that sec-

tion of conveyor. Procure a piece of heavy, stiff paper, or thin cardboard, long and wide enough to make a pattern for the flight. Cut, bend and twist the thick paper until it will fit closely and snugly along the whole length of the broken flight, whether three feet or 10.

"Better use several light clamps to hold the paper in place so you can fit one portion while the fitted section is held securely in place. After the paper pattern has been fitted to meet requirements and your ideas, then cut out the shape from the lightest, thinnest sheet metal you can lay hands on. Leave enough metal on each side of the new metal pattern, that it in turn may be cut and fitted more closely to the conveyor shaft, for flight patterns cut from paper and from metal, do not always cause the flight, sheared from thicker metal, to fit as closely as desired. So, leave some metal for trimming, when the real flight is completed.

"The thin metal pattern, when cut out by the paper pattern, should also have a little excess metal on each edge that it may be fitted closely to the conveyor shaft when it is bent and hammered into shape alongside of the broken flight."

"But, Mr. Davis, why not make the thin sheet metal pattern to begin with and save the time of first cutting out the thick paper pattern?"

"That can sometimes be done, Mr. Cornish, particularly if the flight section be a short one. But when the broken flight is long, time will be saved by making the paper pattern first, and a thin sheet metal pattern from the paper pattern.

"It is a hard matter to cut and fit a metal pattern alongside of a long and wide flight, unless the sheet metal has first been cut to approximately proper shape before trying to fit and bend the sheet metal closely to the broken flight. When cutting the sheet metal pattern, do not forget to rivet or solder upon it, patterns of such lugs as must be left upon the thick metal flight which is to replace the broken flight."

DURUM CROWDED OUT

Discussing farmers plans for the coming season, the Federal Bureau of Agricultural Economics declares that the low price of Durum wheat has influenced growers in the Spring wheat territory to plan a reduction of 20 per cent in Durum acreage, but that this would be made up by increases of 8 per cent more bread wheat, 10 per cent more flax, and 6 per cent more barley, the prospective combinations varying in different sections from Minnesota to Montana.

On the whole, the bureau declares, it appears that the general crop program this spring is well balanced, barring some possible overplanting of Spring wheat, burley tobacco, and, in certain areas, beans.

FARM PRICE INDEX ADVANCES

The index of the general level of farm prices advanced from 136 to 140 per cent of the pre-war level from February 15 to March 15, the latest period reported on by the United States Department of Agriculture. At 140, the index is three points higher than on March 15, 1928, and 14 points higher than in March two years ago.

The advance of four points since February 15 is accounted for by a seasonal advance in the farm price of horses and mules, a sharp advance in the price of hogs, "moderate" price advances of corn, cotton, and apples, and "slight" advances in the farm price of wheat, flaxseed, hay, milk cows, butterfat, and chickens. The upturns in these commodities, however, were partially offset by a seasonal decline in egg prices and minor declines in farm prices of oats, barley, potatoes and wool.

Corn prices advanced about 2 per cent from February 15 to March 15. The advance was accompanied by a continued strong export situation, expectations of a relatively low yield in Argentina, and a considerably smaller increase in commercial corn stocks than occurred last year.

PERSIA'S HIGH PROTEIN WHEAT
CUT THIS MONTH

A million square yards of Persian rugs, imported each year into the United States, incidentally serve to cover up the fact that Persia is noted for high protein wheat as well as for magic carpeting. It took an Englishman, Edward Fitzgerald, to translate the Persian "Rubaiyat" of Omar Khayyám in a fully satisfactory way. It takes the English to get the most out of the red, white, and dusty, barley-mixed Persian wheats disgorged at Liverpool and London by the ships from east of Suez.

Dr. Kent-Jones, English cereal chemist, reports the protein content of Persian wheat is "often surprisingly high." It is probably the strongest of all Asiatic wheats; 9 per cent is a common protein percentage for Indian wheats, next door to which is grown Persian wheat with its average of 10.5 or 11 per cent protein. Some Persian varieties have tested around 12 per cent. Moisture percentage is about the same as that for protein.

Persian wheat, however, is not considered exactly as a blessing by the English grain and mill trade. It arrives dry, flinty, hard and brittle. Persian grain shippers are not as careless as they used to be. Their wheat is not so dirty as formerly, but it still is excessively dusty, and loaded with a generous amount of barley which reflects the free and easy

nary estimates made August 1 was 0.13 bushels or 1.2 per cent.

The average difference between the finals and the July 1 forecasts has been 0.82 bushel or 5.4 per cent. (If two abnormal years were omitted the difference for the remaining 16 years was 0.68 bushels or 4.5 per cent.)

The average difference between the finals and the June 1 forecasts has been 1.2 bushels or 7.8 per cent. (If the two abnormal years were omitted the difference would be 0.98 bushels or 6.4 per cent.)

The average difference between the finals and the May 1 forecasts has been 1.25 bushels or 8.2 per cent. (If the two abnormal years were omitted the difference would be 1.05 bushels or 6.8 per cent.)

If we were to assume each year that the yield per acre would be the same as the preceding 10-year average, the average error of such assumption would have been 1.27 bushels or 8.3 per cent.

Referring to Spring wheat, the average difference between the final estimates and the October 1 preliminary estimate was 0.25 bushels or 2.2 per cent.

The average difference between the finals and September 1 forecast was 0.74 bushel or 5.7 per cent. The average difference between the finals and the August 1 forecasts was 1.31 bushels or 10.1 per cent. The average difference between the finals and the July 1 forecasts was 2.71 bushels or 21.1 per cent. That is, the average error is slightly greater than

of oats and the October 1 preliminary estimate was 0.18 bushels or 0.6 of 1 per cent.

The average difference between the finals and September 1 forecasts was 0.85 bushels or 2.7 per cent. The average difference between the finals and August 1 forecasts was 1.57 bushels or 4.9 per cent (if one abnormal year had been omitted the difference would have been 1.33 bushels or 4.3 per cent).

The average difference between the finals and July 1 forecasts was 2.89 bushels or 9.1 per cent.

If we were to assume each year that the yield would be the same as the preceding 10-year average, the average error of such assumption would have been 3.64 bushels or 11.5 per cent.

MICHIGAN MAN'S ELEVATOR IS
PICTURE OF ENERGY'S
REWARD

Where the Pere Marquette railroad cuts through the fat southern Michigan farm lands toward the northwestern part of the state it passes through the little town of Gowen. At Gowen the Pere Marquette sets out a spur by the side of which stands a bright new elevator, so new that it first turned its wheels in the fall of 1928, has turned them only five months.

Petersen Elevator Company, the sign reads. Albert M. Petersen is the sole owner. He, too, was the builder, and he is the superintendent. And the following is what he built and superintends.

Within dimensions of 28x60x22 feet he built a plant of wooden construction with a storage capacity of 5,000 plus bushels, capable of receiving 100 bushels per hour and shipping 650 bushels per hour. There are seven bins, set on the second floor, square, cribbed in a 28x24-foot space.

One 100-bushel per hour grain cleaner is used. One 75-bushel cylinder corn sheller and one one-ton per hour modern feed grinder do duty.

For the present Mr. Petersen gets his power from a 20-horsepower kerosene burning tractor but intends to replace it with electric power later on. The present drive is by belt.

A sprinkler system is to be installed as soon as possible for fire protection. A one-ton Fairbanks-Morse Platform Scale and a three-ton hopper scale are installed. Thoughtfully built, there is also a machine shop and garage in connecting structures.

Mr. Petersen handles wheat, rye, oats, corn and beans, and he has not overlooked the productivity of his territory, Montcalm County, and carries as a sideline that county's principle crop, potatoes. He has a 4,000-bushel storage capacity for these alone.

"If the superintendent has as good a storage of energy as of other growing things," says the superintendent-owner of the Petersen Elevator Company, "the plant should prove very profitable with the great potato sideline."



A LARGE COUNTRY GRAIN MARKET IN PERSIA

sowing habits of rural Persians. A peculiarity of the Persian wheat is that its protein elements are highly coagulated. It requires a much longer conditioning period than any American wheat.

Harvesting of Persian wheat now is underway, and a crop, average in quantity and quality, is expected. By next month, much of the grain will have been absorbed for domestic use in the interior country markets, where grain is dumped on the ground in great piles, for unofficial inspection. In June the export surplus of Persian grain will begin to move on the long haul westward, riding steerage. Much of the dusty soil from which it sprang, loyally will ride with it, f.o.b.

CROP REPORTS AS FORECASTS

In his monthly statistical letter, Nat C. Murray of Clement, Curtis & Co., Chicago, has some interesting data on the accuracy of Government forecasts over a long period of years. Mr. Murray says:

For 18 years the Government has been interpreting its monthly crop condition reports into indicated yield per acre. An examination of these reports of the past 18 years enables us to measure their value as forecasts.

The average difference between the final estimates of yield per acre of Winter wheat and the prelimi-

nary estimates made August 1 was 0.13 bushels or 1.2 per cent.

The average difference between the finals and the July 1 forecasts has been 0.82 bushel or 5.4 per cent. (If two abnormal years were omitted the difference for the remaining 16 years was 0.68 bushels or 4.5 per cent.)

The average difference between the finals and the June 1 forecasts has been 1.2 bushels or 7.8 per cent. (If the two abnormal years were omitted the difference would be 0.98 bushels or 6.4 per cent.)

The average difference between the finals and the May 1 forecasts has been 1.25 bushels or 8.2 per cent. (If the two abnormal years were omitted the difference would be 1.05 bushels or 6.8 per cent.)

If we were to assume each year that the yield per acre would be the same as the preceding 10-year average, the average error of such assumption would have been 1.27 bushels or 8.3 per cent.

Referring to Spring wheat, the average difference between the final estimates and the October 1 preliminary estimate was 0.25 bushels or 2.2 per cent.

The average difference between the finals and September 1 forecast was 0.74 bushel or 5.7 per cent. The average difference between the finals and the August 1 forecasts was 1.31 bushels or 10.1 per cent. The average difference between the finals and the July 1 forecasts was 2.71 bushels or 21.1 per cent. That is, the average error is slightly greater than

GRAIN, LUMBER, MILLING MIX;
LUMBER FIRM WINS

The dispute of a lumber company and a milling firm, arbitrated by a committee of grain traders, resulted this month in an award of \$359.60 for the plaintiff, the C. C. Isely Lumber Company, of Dodge City, Kan. That was the exact sum which the lumber firm sought to recover from the Scott County Milling Company, defendant firm of Sikeston, Mo. The mill claimed the amount represented justifiable discounts applied against two cars of wheat ordered from the Kansas concern.

However, "when grain is contracted on official inspection at point of origin," Arbitration Committee No. 5 of the Grain Dealers National Association held, "and when official inspection certificates are furnished, the buyer cannot assess discounts on account of grain misgrading at destination."

THE 19 elevators in Milwaukee, Wis., have the same capacity as the 35 in St. Louis: 11,500,000 bushels.

BUFFALO, N. Y., and Kansas City, Mo., have 38 elevators each, and each city has a 41,000,000-bushel storage rating.

JAPAN'S WHEAT HUNGER GROWS

Wheat is gaining ground in its competition with rice in the Orient. Consul Kemper, at Tokyo, through a dispatch the second week of April, announces February wheat imports into Japan (3,673,000 bushels) were the largest in this fiscal year. A striking increase is shown in July-to-March shipments this season, compared to those of last year. Since July 1, about 17,000,000 bushels of wheat have been brought to Japan, as against 10,000,000 during the 1927-28 period.

Canadian wheat shippers are taking the lion's share of Nippon wheat orders, but the competition is three-sided for Australian wheat rivals United States and Canadian grain.

Imports from both United States and Canada during February were below those during January. The imports from the United States were 433,000 bushels, bringing the total for the year to 2,750,000 bushels against 3,620,000 bushels during the same period last year. The imports from Canada were 1,991,000 bushels, bringing the total since July 1 to 3,781,000 bushels against 3,869,000 bushels during the same period last year.

DUTCH ELEVATOR WILL BE IN
2,000,000-BUSHEL CLASS

A large grain company of Rotterdam has announced the construction in the near future of a new grain elevator for the discharge and storage of heavy grain in bulk, and seeds, increasing its present storage capacity of 20,000 tons to 58,000 tons, or approximately 2,000,000 bushels. When completed, says Vice-Consul Nabel, it will be one of the largest grain elevators in Europe. This action has been taken because grain arrivals at Rotterdam both for warehousing and transshipment are steadily increasing.

Another reason for the extension of elevator facilities is that greater warehousing space is required by the development of the trade in futures in wheat and corn. The Rotterdam futures market in wheat and corn has been in operation since 1912. Previously most grain arriving has been simply transferred directly to another vessel. During 1928, arrivals at Rotterdam of grain in bulk totaled 4,500,000 tons, grain in sacks, 3,850,000 sacks; similar figures for the preceding year were 4,600,000 tons and 4,710,000 sacks.

RICE OUTLOOK FAVORABLE

The prospects of a smaller rice crop this year in the Southern States and a reduced carryover into the next season improves the market outlook for southern rice. Exports of southern rice to foreign markets and shipments to Porto Rico, so far this season have been on a much higher level than in 1927-28, which should result in a considerable reduction in the quantity of southern rice carried into the 1929-30 season.

Exports of southern rice for the first half of the current season were 45 per cent larger than in the same period in 1927-28, Government figures show, while shipments to Porto Rico were 25 per cent larger.

The outlook for a continued favorable export movement is strengthened by reports of reduced rice crops in the Orient. It now appears that the exportable surplus of the principal Asiatic rice exporting countries, Burma, Indo-China, and Siam, will be smaller than in 1928, and that poor rice crops in China will necessitate heavy imports into that country, which should mean less competition to be met by American rice from Asiatic rices in other foreign markets.

Exports of California rice have been larger so far this season than the very small exports of 1927-28, but still much below the shipments of 1926-27. However, Japan is seldom in the market for large quantities of California rice until the last half of the season and considerable quantities may be disposed of in that market during the remainder of the season.

J. H. Pearlstone's Elevator
Outgrew Palestine and
Moved to Dallas

IN THE year 1918 J. H. Pearlstone had, perhaps, the most excitement in nine years of his grain trade life. And as he went about his work then he thought of that time nine years ago, in 1909, when he had started his mill and elevator company in Palestine, Texas, busy Anderson County town, southeast of Dallas.

It had been exciting then, too, getting his plant off on its maiden voyage. It was like a first ocean voyage, for sure.

But in 1918 he was looking northeast, toward Dallas. It was more like a first airplane ride. In that year the Pearlstone Mill & Elevator Company moved to that city of the hour, the great central market of the Southwest, then coming into its own. J. H. Pearlstone had an industrial plot in Dallas

incalculable bounty of future greatness for Dallas and the world.

Since then 11 years have passed, and with it, perhaps, the excitement. Everything went as well as had been planned. With President Pearlstone, of the Pearlstone Mill & Elevator Company, are A. A. Hart, treasurer, and C. J. Wheeler, secretary. And this is what they summoned the Jones-Hettelsater Construction Company, of Kansas City, to build on that ground area and what the construction company fulfilled efficiently and well.

A concrete elevator with a storage capacity of 600,000 bushels has risen. Two-hundred and fifty carloads of grain can be stocked in its warehouse. A cornmeal plant turns out the only finished grain product, as the company does not manufacture any



DALLAS ELEVATOR OF THE PEARLSTONE MILL & ELEVATOR COMPANY

100 by 500 feet on the Santa Fe and Frisco Railways on which there was going to be the reason for his excitement. Here would rise the new elevator and cornmeal plant.

There are numerous and highly tangible reasons why Mr. Pearlstone moved to Dallas. It is in the center of a \$6,000,000,000 market, with a population of 12,000,000. It alone is sufficient to safeguard any industrial investment. Permitting rapid and easy service to people within cities and towns 100, 200 and 300 miles distant by package cars and trucks, it is really the nucleus of a country great in itself. It serves the whole Southwest strategically. Two thirds of its population and wealth are within one-day express service radius.

Costs of operation and climatic conditions make it no less adaptable to Mr. Pearlstone's elevator than any other business. Here not only can he go to wherever business may be but business can readily come to him. Where before the Pearlstone Mill and Elevator Company was situated in a town served by Dallas, its position is now reversed. That it is immensely enlarged also is obvious.

A cursory study of the map of Texas is a most convincing argument of the future of this city of nearly 160,000 people. If the uninitiated should hesitate before the vast spread of unoccupied land to the west and south of Dallas, he had best reconsider. In this rich and varied state, the immensity of the untouched expanse holds surely an

feeds or flour. There is one attrition mill to do the work.

The layout of the equipment is thoroughly effective for quick and easy work. One grain separator and two feeders are lined up for efficient operation. Twenty A. C. electric motors furnish all power.

There are four automatic and two hand scales. They are very effectively placed for instant use.

The Jones-Hettelsater Construction Company commissioned the J. B. Ehrsam & Sons Manufacturing Company, Enterprise, Kan., to furnish elevating and conveying equipment, belt conveyor rolls, head and tail drums, takeups, trippers and elevator boots, and heads with pulleys and takeups. Steel grain spouting equipment and other parts required came, in large degree, from this company, as well as mechanical additions and replacements since initial installations were made.

The Pearlstone Mill & Elevator Company probably will not outgrow Dallas, but has demonstrated its ability to keep pace with that city's dominant growth. The principal business of the company is in export and domestic grain mostly wheat. Superintending the plant is H. H. Johnson.

OCTOBER 7, 1908 was the date of the most fatal dust explosion in any American elevator. Seventeen men lost their lives in the blast at Richmond, Vt.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., APRIL 15, 1929

FARM RELIEF BY SPECULATION

THE value of speculation to the farmers is well illustrated by recent trends in the wheat market. American wheat today is selling above world parity in the face of the fact that the carryover of wheat from last year is much larger than usual, and in face of the further fact that the demand for wheat for export and for American mills is far from lively.

American elevators are filled to overflowing and still the price of wheat is maintained at better than world prices. This result could have been accomplished only by speculative trading. It has enabled countless farmers who took the advice of the Government and held their crop from the market in the early autumn, to profit handsomely, though the supply is plentiful and demand is slight.

HOUSECLEANING

AN INEXPENSIVE paint, easier spread, whiter, and more lastingly white than ordinary white lead, now is available to elevator owners and managers concerned with spring cleanup operations. Elevator paint must stand the gaff of elements to a greater degree than ordinary industrial structures. The unusual height of even small capacity elevators exposes them to high velocity wind, rain and hail to which lower buildings are not subjected. Hence an elevator should have the best of paints and other exterior protective materials.

The particular paint referred to offers more than high protective value. Tests made with it and white lead, show that after two years of

exposure adjacent to railroad tracks, its clear white color remains, while the white lead paint devolved into the well known dull gray.

Elevators should be a credit to their communities. Dingy appearance does no credit to either the owner or the city. A rundown elevator bespeaks hard times and careless management to the passerby, who may be a potential customer. A bright, newly painted elevator set on a well kept property is one of the best advertisements for sideline and grain trade that can be bought. This is so because people are that way—they are attracted by an orderly, prosperous looking exterior.

BELIEVE IT OR NOT

HERBERT HOOVER is the first president of the United States to have a telephone installed at his desk in the white house. This almost incredible bit of April news, so grossly neglected by the alert Associated Press, has obvious significance.

Grain trade executives who for years have had clusters of phones on their desks, connected with private and public exchange wires, may be astounded to learn that previous chief executives of this nation have seen fit to carry on their daily business communications in a rather quaint, almost colonial manner.

A booth, it seems, was provided for the dynamic Mr. Coolidge and all his recent predecessors. The booth was located "near the president's office." Journeying thither, and cloistering himself in it, the busy, \$75,000 a year official could at once become kin to the nickel-dropping public who inhabit drug and cigar store booths.

President Hoover will forego this democratic gesture, in favor of efficiency. The Government touches the grain trade and all other industries increasingly these days. Any news indicating that this contact will at least be business-like, is cheering.

INDIRECT GRAIN EXPORTS WORK BOTH WAYS

SINCE the World War large quantities of United States grain have been shipped to Canada in transit for Europe. Ordinarily the exporter does not know at the time of shipment what will be the final destination, and consequently the destination is given in our trade statistics as Canada. Were it possible to show correctly the destination of this export grain, the total value of our reported exports to Canada during recent years would be considerably lower, and the value for several of the principal European countries considerably higher.

Thus in 1928 the published statistics showed Canada, for the first time, as the leading country of destination for American exports, with a total of \$916,000,000. Had the grain passing through Canada to Europe been deducted, however, our northern neighbor would have remained second to the United Kingdom as a destination of exports, the adjusted figure of exports to Canada being somewhere between \$835,000,000 and \$840,000,000, according to *Commerce and Industry* figures, while the

United Kingdom, as against the reported figure of \$847,000,000, would have shown a total of approximately \$860,000,000.

This practice of shipping grain through Canada to Europe was relatively unimportant before the war, and even in 1919 the figures were still small, but since 1920 the value of grain reported as going to Canada has ranged from \$40,000,000 to nearly \$115,000,000 annually. The principal item is wheat, but there is also normally a large quantity of rye and in some years of corn. The wheat and rye in this trade are mostly shipped from the port of Duluth-Superior or from Chicago to Canadian ports on Georgian Bay or on Lake Erie, whence the grain moves to Montreal and abroad. A certain quantity also moves through Buffalo.

Important as is this movement of United States grain through Canada, it is much smaller than the exportation of Canadian grain to Europe through United States ports. Thus in 1927, as against a total value of exports of United States grain reported as going to Canada, \$114,00,000 (the highest figure ever attained), the value of Canadian grain, including flour, exported through United States ports was \$194,000,000. Moreover, the proportion of Canadian grain exported through the United States is normally higher than the proportion of United States grain exported through Canada.

It should be noted that the Canadian grain passing abroad through this country is not counted either in our import or our export statistics, but is treated purely as transit trade. Apart from corn, of which Canada takes annually a value of from \$5,000,000 to \$10,000,000 for its own consumption, almost none of the grain reported as exported from the United States to Canada actually remains in that country.

HELP FOR "RAILROAD BOYS"

YEAR after year, it seems, "railroad paper" racketeers make the rounds of Illinois elevators, and pry cash loose from many managers and other executives who are too busy to find out just what they're paying for. The racketeers usually work in pairs, and introduce themselves as "railroad boys on your division," who are soliciting ads for their brotherhood paper. "Ads" are priced at \$5 and up.

Grain dealers naturally like to help the men who serve them daily, so the sales resistance isn't high.

C. C. Kingdon, Illinois elevator operator who has bought several ads in recent seasons, this year proved to be the "brotherhood's" nemesis. Thinking things had gone about \$25 too far, Mr. Kingdon displayed special interest in the solicitor's proposition when they arrived at his elevator this spring. He began to question them about the railroad, and what they didn't know about its divisions, officials, trains, and stations would fill a grain tariff book. Suddenly they left with Mr. Kingdon on their heels. Through the dust kicked up by their uncereceremonious exit, he got the license number of their Hudson sedan: 445-303 Missouri.

It seems they were from the Missouri division.

EDITORIAL MENTION

The cost laying down a bushel of wheat in Liverpool is from one to two cents less *via* a Pacific Coast port than through eastern outlets. Geography doesn't mean much any more.

The public grain elevator at New Orleans shipped around 1,600,000 bushels of grain last month—not bad for the ninth month of a crop year.

Sacks of beans by the 10,000-lot, are being shipped from Pacific Coast ports to Mexico in order to relieve the shortage occasioned by crop failure. Revolutionists must live.

A grain elevator at Tulia, Texas, is installing a revolving beacon light on its headhouse to guide aviators. The typical architecture of American elevators makes them loom up logically as lighthouses for our airways.

Argentina has an exportable corn surplus of 207,000,000 bushels this year. While the tariff commissioners in Washington have been pondering a corn tariff increase, the South Americans have harvested their grain, and are now pushing it to seaboard.

The year of 1935 is named in the metric system bill still before a Congressional Committee, as the date on which grain dealers, along with nearly everybody else, would be compelled to buy and sell on the basis of metric units. Organizations back of this measure and the movement to change the calendar by the addition of a new month, are stronger than is generally realized. At dealers' conventions these subjects should be considered and opinion crystallized. It will be unwise for the trade to wait until the last minute or the last year to make a new record of their views.

Edward Jerome Dies makes the following distinction between speculation and gambling: "Speculation consists in buying or selling property with a view to making a profit between the buying and the selling price and in the meantime accepting the risks. This is true in grain just as in real estate or any other commercial endeavor. Gambling consists in wagering money on some future event without any necessary relation to the acquisition or disposal of property. The risks in speculation are those incident to the ownership of property. The risks of gambling are unnecessary and artificial risks. It is utterly ridiculous to confuse speculation and gambling." Speculation is an essential part of our exchange system of marketing. It allows those who want to assume risks to do so, and it enables those who want to escape risks to do so. It is the best and cheapest system yet devised to give us a constant market, to stabilize it so far as that is possible, and to make business safe for the operator who does not want to speculate.

Buffalo grain men who handle Canadian feed-stuffs are protesting the liquor-search proposal

of the trunk line association. The railroad companies have been troubled for some time with whisky and other refreshments which are "erroneously" billed through as feed. Federal agents, catching sight of some leaking bran, will pounce upon a car and demand it be switched off for unloading and inspection. The agents take the liquor, if any, and all that's left for the carriers is expense. It is the railroads' opinion that feed dealers should share this prohibition expense in a nice gentlemanly way. The dealers have no sentiment, however, and hence the proposed \$4.50 charge per car on feed from Canada billed to border points. The eighteenth amendment may have to be repealed before the matter is straightened out.

CROSS SECTION NOTES ON THIS ISSUE

Arthur M. Hyde, now Secretary of Agriculture, has had his ups and downs. In 1912 he followed the Roosevelt trail and was slated as attorney general for the Progressive party. "I got a worm's eye view of the steam roller that year," he says. A bird's eye view of his farm relief ideas is afforded on Page 593.

Across-border grain shipments that aren't listed either as exports or imports and how this happens is told on Page 598, in the editorial "Indirect Grain Exports."

Dallas is proud of the elevator described on Page 597.

Protein in Persian wheat—read what else the English find in wheat from the rug country: Page 596.

Figures on the largest lake wheat cargo and other naval records set by grain fleet sailors: Page 594.

Newest elevator development of America's oldest mill firm: Front page.

Reflections on reflecting premiums to growers: Page 592.

Feed and Seed Sections:

Feed mill census: Page 614.

Seed 100 years old that grew: Pages 624-5.

Up-to-date seed, hay, and feed news from various markets by Carleton, Skinrood, Trafton, and Federal analysts: Page 614-30.

A small feed outlet with a big turnover: Page 614.

Chief engineer of the Mutual Fire Prevention Bureau takes issue with some of Mr. Hobart's views on bearings, and proves his points on Page 604.

Extra: Picture and description of the hand-shaking expedition from the grain trade which President Hoover has welcomed. Page 603.

Agriculture, which will bulk large on the congressional horizon at the special session, will also have conspicuous place in the deliberations of the Chamber of Commerce of the United States which will hold its seventeenth annual meeting at Washington beginning the last of this month. A special round table session will be devoted to the consideration of the marketing of agricultural products. Some of the questions to be brought forward are these: What is the basic function of the co-operative marketing association? What is the relation of co-operative marketing to other forms? Does

the development of co-operative marketing depend upon Federal and state aid? What Federal and state aids and services are equally beneficial and desirable for co-operatives and other marketing agencies? To what extent is exemption of co-operatives from provisions of anti-trust laws a handicap to competing marketing agencies? Other questions will be considered from a practical business viewpoint, as contrasted to their more frequent consideration from a political viewpoint.

The president of Argentina recently asked the grain trade of that country to make suggestions as to economic measures that might be of benefit to farmers. The main proposition put forward is that grain exporters should make advances to farmers at 5 per cent interest to facilitate the holding of wheat with a view to regulating deliveries. The grain marketing system in Argentina is not so highly developed as that in this country, and the grain exporters there are big merchant firms which deal largely direct with the farmers, sometimes even financing them for the putting in or the harvesting of their crops. The present proposal might therefore be but an extension of the existing system and might work in that country, whereas it would not be at all applicable here. The idea of holding back wheat and of regularizing deliveries is, however, familiar enough.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

Of AMERICAN ELEVATOR AND GRAIN TRADE, published monthly at Chicago, Ill. for April 1st, 1929.
State of Illinois }
County of Cook } ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared A. J. Mitchell, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the AMERICAN ELEVATOR AND GRAIN TRADE and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:
Publisher, Mitchell Brothers Publishing Co., 431 South Dearborn St., Chicago, Ill.

Editor, Richard Pride, 3523 North Racine Ave., Chicago, Ill.

Managing Editor, Richard Pride, 3523 North Racine Ave., Chicago, Ill.

Business Manager, A. J. Mitchell, 4820 Kimbark Ave., Chicago, Ill.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)
A. J. Mitchell, 4820 Kimbark Ave., Chicago, Ill.

A. H. Mitchell, 4818 Dorchester Ave., Chicago, Ill.

M. B. Mitchell, Ottawa, Ill.

John W. Mitchell, Washington, D. C.

Sheridan Trust & Savings Bank, Estate John E. Bacon, Chicago, Ill.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company, as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is: (This information is required from daily publications only.)

A. J. MITCHELL,

Business Manager,

Sworn to and subscribed before me this 22nd day of March, 1929.

(SEAL)

W. F. WARRICK,

(My commission expires May 8, 1932.)

W. S. MILES
Peoria

NEWS OF THE TERMINAL MARKETS

J. G. MC KILLEN
Buffalo

RICHESON OPENS MEMPHIS OFFICE

W. L. Richeson, president of the New Orleans Board of Trade, has announced that his firm, W. L. Richeson Sons, freight brokerage and forwarding house, has opened a Memphis office in the Cotton Exchange Building. Charles B. Bowling has been made vice-president and manager of the new office. This office will handle the company's Mississippi Valley business.

Mr. Bowling is well acquainted throughout traffic and trading groups, and was formerly traffic director of the American Cotton Growers Exchange of Memphis, organizer of the Cotton Club there and is a member of the Southwestern Shippers Advisory Board. He was instrumental in the systematizing of the Arkansas Cotton Growers Association, later becoming traffic manager, and was an officer in the Little Rock (Ark.) Traffic Club.

VOLUME OF GRAIN FUTURES TRADING IN MARCH

Chicago grain futures trading last month reflected the season with a volume that was close to that of March, 1928. The total for all grains was 1,362,312,000 bushels, compared to the 1,575,511,000 bushels of March, 1928, and well above the 1,146,549,000 bushels in February, 1929. The March total was divided among the grains (the February figures are given in parentheses for comparative purposes) as follows: Wheat, 905,276,000 bushels (743,378,000); corn, 380,331,000 bushels (340,898,000); oats, 59,935,000 bushels (40,466,000); rye, 16,770,000 bushels (21,807,000).

Average open contracts in futures in Chicago in March, "short" side of contract only, there being an equal volume on the "long" side, were: Wheat, 144,719,000 bushels, compared with 88,281,000 in March, 1928, and 127,350,000 in February; corn, 78,542,000 bushels, compared with 98,849,000 in March, 1928, and 79,574,000 in February; oats, 27,320,000 bushels, compared with 33,671,000 in March, 1928, and 26,288,000 in February; rye, 8,510,000 bushels, compared with 8,355,000 in March, 1928, and 9,343,000 in February. Average total for all grains in March was 259,091,000 bushels, in comparison with 229,156,000 a year ago, and 242,555,000 in February of this year.

A GOVERNOR SENDS A TELEGRAM

Recently Governor Weaver of Nebraska bent diligently over a pad of yellow paper setting down words. He was writing a telegram, but he did not bother to count the number of words, which, if he had, would have numbered 55 not counting the gubernatorial signature and accompanying titles. It read:

"I congratulate Omaha upon being not only one of the greatest livestock markets in the world but also one of the greatest grain markets. Since all of us can vision the future greatness of Omaha we know that these primary markets will continue to be of ever increasing benefit to Nebraska and the Middle West."

This telegram was addressed to the Omaha Grain Exchange and was read before its members on the occasion of its twenty-fifth anniversary.

Nineteen hundred and four was the year of its organization. It began in modest quarters that bespoke only from the attitude of the men in them that this small beginning meant something. There were 15 firms actively in business 25 years ago. And in that starting year 16,000,000 bushels of grain were received. Now there are 43 firms and

187 active members in the Exchange. And in 1928 the volume of grain was 77,817,400 bushels.

The Exchange moved into a modern, eight-story home 13 years ago, where it has since operated. Since organized, a sharply competitive market valuable to grain raisers in the region has been maintained. It begins its second quarter-century of operation secure in the knowledge that its important part in the marketing of grains has received official recognition.

SOME NEW, SOME OLD FACES HEAD MILWAUKEE CHAMBER

The recent election of officers of the Milwaukee Chamber of Commerce brought to the fore some new names, and kept to the fore ones long associated with the Chamber's officialdom. Once more A. L. Johnstone was named president and H. A.



A. L. JOHNSTONE

Plumb continues his longtime office of secretary and treasurer.

Vice-presidents are A. L. Flanagan and Edward La Budde, who held those positions last year. R. I. Campbell is held over as director.

New directors are L. J. Keefe, H. H. Ladish, and J. V. Lauer and E. S. Terry were elected to the arbitration board. W. A. Hottensen, H. H. Peterson and Harry M. Stratton were placed on the board of appeals without contest.

Mr. Johnstone first came to Milwaukee with the Milwaukee Elevator Company, branch of the Armour Grain Company. Since 1904 he has been in business for himself and a member of the Chamber of Commerce. He has been partner in the firm of Johnstone-Templeton Company for many years. In 1915 he was first made an official of the Chamber, as a member of the cash grain committee, and has been one ever since, holding several offices before becoming president.

CORN HELD FOR NEW CROP INSURANCE

The rain which wound up last Monday brought an inch and a quarter of water. Following this came real summer weather with the thermometer near the 90 mark on days of early April here.

We can say as the Californians do, "Such unusual

weather." Fruit trees are coming into bloom, early shade trees are putting out their leaves, outdoor tulips are in full bloom, and it may be said that the average growth of vegetation is about two weeks earlier than in an ordinary year.

The farmer has his fields selected for oats about all seeded, the exceptions being low lying lands where waterfall did not drain off promptly. Some oats sown a week ago now show a good stand above ground. We note some farmers have gone directly from their oat fields to work in those reserved for corn.

Occasionally we note a little corn going in local elevators from farms, but, on account of lower prices now offered, most corn owners will hold on to their reserves until the new crop is safely seeded.

It is our impression that most all mills and consumers of corn have let their stocks run very low as spring approached and prices declined. Should receipts let up materially it is likely that a better demand will put in an appearance.

One hears discussions these days as to the advisability of selling corn stalks at three dollars per acre to make paper, should this opportunity offer. We note that at least one-half the stalks in this territory have been raked and burned this year and would judge from this that Mr. Farmer does not rate his corn stalks very high as a fertilizer. Possibly the real problem is how to collect the stalks and haul them to the central point in quantities large enough to make it worth while.

A good many oats are being loaded out of country elevators these days—a good demand exists for same. Farmers' stocks do not appear as large as the Government report estimated same to be.—H. I. Baldwin & Co., Decatur, Ill., letter of April 6.

THE NEW YORK PRODUCE EXCHANGE "FROLIC"

By C. K. TRAFTON

More than two months of intensive rehearsing on the part of about 40 members of the New York Produce Exchange Bowling League were brought to a triumphant climax in the grand ballroom of the Waldorf-Astoria Hotel on the evening of Friday March 15 with the presentation of their third annual Frolic in the form of a three-part revue, "Bids and Offers", arranged by those clever and indefatigable producers and coaches, Messrs Liddy, Gilligan and Boyle.

When the curtain rose the spacious ballroom floor and all of the boxes were comfortably filled by an assemblage of about 1400 Produce Exchange members, their families and friends, including a number of out-of-town guests attracted by the highly favorable reports regarding the entertainments put on by the "Bowlers" in 1927 and 1928. They confidently awaited the show.

And when the curtain fell after two hours of harmonious singing, agile dancing, and clever specialties performed in beautiful stage settings and adorned by what may well be described as the most lavish and colorful ever seen in an amateur entertainment, it was the unanimous verdict that "the boys" had far exceeded their two previous highly successful performances.

Although "Bids and Offers" was much more ambitious than its predecessors and therefore a great deal more difficult, the fact that it was "put over" without a hitch from start to finish, the latter coming practically at the scheduled time, proved the utter baselessness of early doubts regarding the ability of a cast of absolute amateurs to carry their

difficult undertaking through to such a highly gratifying conclusion.

The large and brilliant audience was spontaneously liberal with its applause and its laughter, and at the close compliments and congratulations were flying thick and fast.

Snatches of some of the remarks may be summarized as follows: "The solo and chorus singing were fine; the dancing 'girls' were wonderful; the acting and stage 'business' were excellent; the settings very pretty, and, my dear! Where did you ever get all those gorgeous costumes? It looked like a Broadway show." And this for a performance by men only, members of the Exchange.

CONSUMER STOCKS LOW

There has been no improvement in the cash grain situation in this market during the past month. While country receipts have fallen off sharply, supplies in elevators are not being reduced as much as is normal at this season of the year. For some reason as yet unexplained, the eastern consumer is letting his stocks run down very low and it is probable that when they commence to replace their depleted stocks we shall see a very active market as feeding is on a very profitable basis throughout the East, especially since the recent declines in value of both grain and by-products.—*J. G. McKillen, Inc., Buffalo, N. Y., letter of April 10.*

INDIANAPOLIS HAS LIGHT RECEIPTS

Conditions would indicate that we are entering a period of light receipts of grain. While our receipts of corn have shown up very favorably for the last week or 10 days for this time of the year the bulk of our receipts is corn which is being moved into this market from other terminal markets. We look for a good demand for cash corn with prices tending to advance in relation to the option.

On oats the sharp advance we have had in the option the last few days has not been reflected entirely in the cash situation as our receipts have been a little above expectations and probably the cash condition won't get better until the present accumulation is absorbed and receipts of oats get lighter.

Our receipts of wheat have been very light. As a matter of fact, there is hardly enough wheat arriving to make a market.—*The Cleveland Grain Company, Indianapolis, Ind., letter of April 10.*

PEORIA KEEPS IN STEP

Since we last wrote you there has been nothing of great interest in our market. The daily consumptive capacity here right now is about 70,000 bushels of corn. This is a cut-off of about 10,000 bushels daily since our last letter. There has been a little dullness in some of the trade. The arrivals at Peoria have for most part been sufficient for the demand but a good deal of the time the daily receipts have been quite small but at other times very large.

Industries were placed in position to fill up their storage and then some of them cutting their daily grinds put them in a position of staying out of the market most any day they wanted to. The demand, however, has been good enough most of the days to keep our market well in line for shipment especially from Illinois territory.

The situation now is that arrivals are almost equal to the daily grind and the industries, most of them, still have fair stocks on hand. We do not see any evidence that there will be any further reduction in the daily requirements and we believe the Peoria market will be equal to other competing markets and at times a little better. The crop of 1928 was of such uniformly good quality that we only now and then get any Sample grade and this is usually from having been heated, and the industries are not caring much for Sample corn excepting corn that is just beginning to heat.

The arrivals of oats at Peoria have been lighter than other competing markets for the reason that from our standpoint the trade has been dull and we do not seem to be quite able to meet values that are obtainable elsewhere. However, the few

cars that come strike a good market from day to day and we believe from now on until the new crop that conditions will be better here for oats shipments.

There is no wheat of consequence being handled here. Observations at country points throughout this state show that the growing wheat is in fine condition. Farmers have been able to work and seed their oats and will doubtless be in position to plant their corn in good time unless, of course, unfavorable weather prevents.—*P. B. & C. C. Miles, Peoria, Ill., letter of April 10.*

SHEPPERD AT WHEAT MEET

The wheat improvement committee at Toledo, Ohio, heard E. K. Shepperd of the Cleveland Grain Company, Indianapolis, representing the Indianapolis Board of Trade, express the enthusiasm and willingness of grainmen to collaborate in the effort to improve the wheat crop in the Central region. The Indiana movement to make the improvement and to encourage seeding, recently crystallized into workable form, includes Michigan and Ohio, to which the situation is equally important.

The Soft Winter Wheat Improvement conference met to discuss the preliminaries to a five-year program for standardizing the best varieties of wheat for milling requirements, winter hardness and yield. The three states are closely co-operating in the effort, the ultimate aim of which will be the



E. K. SHEPPERD

reestablishing of the central region as a Soft Winter wheat growing area.

Purdue University, recently announced as undertaking experiments along this line, will now be joined in the undertaking by Michigan State College. The research work is considered to have a direct bearing on the interests of approximately 700,000 farmers.

THE BOARD OF TRADE GREW WITH CHICAGO AND CITY WITH IT

Ninety-six years ago was the beginning of Chicago, and 81 years ago the beginning of the Board of Trade. One thinks of institutions growing "with the country", in this case with Chicago. But an inspection of Chicago's economic history proves that the Board of Trade had as much to do with making Chicago grow as the city had in making the board grow.

Early in 1848 a small group of influential leaders, engaged in pulling Chicago out of the mud that was old Fort Dearborn, met and organized the Board of Trade for marketing purposes.

Memberships in those days could be bought for a comparatively few dollars. Today, the total value of memberships is about \$50,000,000.

In the old days, toiling wagonloads of wheat and corn arrived from across the prairies in Chicago and were promptly sold at the exchange. Long before the end of the board's eighty-first year, Chicago

was the railroad center of the world and farm products moved to market in modern style. Now calculations are that one-seventh of all the revenue of mid-western railroads is derived from the transport of farm crops to market. A great part of their shipments come to Chicago where the board plays its part.

To maintain a liquid market for the increased volume, the Board of Trade has enlarged its facilities proportionately. Today its vast system of private and public telegraph and telephone wires reach 526 points, spreading their messages of weather conditions yields and crop expectations—all contributing factors to world supply and demand upon which the fair value of commodities is based.

The jobs of 30,000 men and women are directly dependent on the existence of the Chicago Board of Trade. One hundred thousand are employed indirectly because of the "world's largest" commodity exchange.

Members of the board, it is estimated, carry balances of more than \$200,000,000 in Chicago banks to finance the cash marketing of farm products for which the Exchange is noted.

These figures, indicating the important part the board has taken in building Chicago into the fifth city of the world and the financial and marketing center of the middle west, mark the exchange's eighty-second year, which has just begun.

At the start of its eighty-second year, the Board of Trade occupies temporary quarters, awaiting the completion of a new building on the site of the old, made famous by the exchange for almost a half-century in Chicago's loop. The outstanding event of the new year, officials of the exchange assert, will be the opening of a securities market, for which most details are completed.

TWO DIRECTORS, TWO OPINIONS IN THIS TRADE DISPUTE

Illustrating the impartial character of decisions rendered by trade dispute juries of the Grain Dealers National Association, is the verdict returned this month in the case of the Rosenbaum Grain Company, of Chicago, versus J. R. Hale & Sons, Nashville, Tenn.

F. A. Theis, a director of the association, is chairman of the arbitration committee which found for the plaintiff in the amount of \$227.34, and assessed all costs of the case against the defendant firm of which R. W. Hale is a member, as well as a director and executive committee member of the association.

Disagreement arose between the Chicago and Nashville grain companies when the former failed to pay sufficient freight on grain sent to Nashville, causing seven cars of corn to be held on siding there until the underpayment was cancelled. Notified of its error, the Chicago house wired authorization to the Nashville concern to pay the charge and draw on Rosenbaum for the amount paid. J. R. Hale & Sons refused to do this.

Finally, the Chicago firm deposited the margin due in the railroad's Chicago office, and the cars were released. Meantime, however, two cars had begun to heat, and reinspection was ordered by the Hales. On the basis of samples drawn at Nashville, then the Tennessee firm clipped \$227.34 from its balance due Rosenbaum, although contract terms specified Chicago weights and grades.

Arbitration Committee No. 5, declares the Hales' claim invalid because "an error in prepaying freight does not alter original terms of contract when a reasonable effort is made to rectify that error when called to shipper's attention."

FAIR DEMAND AT CINCINNATI

Receipts of grain in our section have fallen off very materially the past week and the cash situation while not heavy is rather active, and we are finding a fair demand.

In reference to the amount of wheat back on the farm in our section. All reports we get are to the effect that the amount held back is very light on the farms and also in the country elevators throughout Ohio and Indiana.—*The Early & Daniel Company, Cincinnati, Ohio, letter of April 10.*

CASH CORN MARKET GOOD AT
PEORIA

Receipts of wheat are practically nothing in this territory. The growing crop of wheat seems to be coming along very nicely. While showing a few barren spots, it does not look as though it was materially hurt by the coatings of ice it had during the winter.

Receipts of corn have been fair to good, but the last few days are showing a tendency to get lighter. Industries have a fair supply on hand, but have been good buyers right along, and our cash market has been higher proportionally than other markets. We look for a good demand to continue.

Receipts of oats have been rather light, but the demand is also light. Our prices here have kept in line with other markets, but the last few days the demand for oats here has been very dull. The eastern trade seems to be able to buy both corn and oats from points near by at lower prices than we can furnish.—*Mueller Grain Company, Peoria, Ill., letter of April 11.*

GOOD MARKET FOR OATS

Corn demand has been fair under rather light receipts from country points. Corn continues to carry high moisture content, only an occasional car running less than 17 per cent. Recent arrivals have shown some musty corn, with moisture running from 18 per cent to 19 per cent. Corn with high moisture test, will, no doubt, continue to cause trouble, and shippers should be careful to not hold this class of corn until it becomes out of condition. All consignments of corn should be forwarded to Pittsburgh for Pennsylvania Railroad delivery, as drying facilities are all on this road only.

Our market on spot is netting shippers about the same basis as card bids.

Oats demand has been slow, arrivals very light. Heavy oats of good, bright color can be moved at premiums. Stocks are decreasing, and oats appear to be in a rather strong position for nearby deliveries.

Movement of cars by the railroad continues to be fast.—*Harper Grain Company, Pittsburgh, Pa., letter of April 11.*

CHICAGO BOARD SETTLES STOCK
TRADING DETAILS

Details of the rules and regulations under which the Chicago Board of Trade will operate its security market have been practically settled. Actually trading merely awaits the final perfection of every point so that the new departure may gather starting momentum.

The new rules substantially embrace those adopted by the New York Stock Exchange, after which the Board of Trade's security market is patterned for the greater benefit and understanding in parallel operation. The essential differences of the two exchanges will be:

One: Hours of trading in securities in Chicago will be from 10 a. m. to 3 p. m., Chicago time, one hour later than New York closing. The advantage will not only lie in the hour later closing but will give the Chicago board valuable time to reach Pacific Coast and other western markets, to which it has an elaborate wire service.

Two: The practice of the Board of Trade of permitting nonresidents of the United States to be members will be continued in securities trading, which is not permitted by the New York Stock Exchange. The board has members residing in Canada, England, France, Holland, Germany and Italy.

Three: Two members of a partnership must be members of the Board of Trade for the partnership to join the clearing house. Individuals may be clearing house members for clearing their own transactions only but not those of others.

Under the new rules penalty for expulsion has been changed, permitting a membership to be sold instead of forfeited. Suspended members must apply for re-instatement within a year or their seats will be sold by the Board.

"There have been certain modifications to tie in the Board of Trade rules with those of the New

York Stock Exchange," disclosed Samuel P. Arnot, president of the board, when the directors had given unanimous approval of the rules. "The directors believe some of the variations from the New York rules will be advantageous to Chicago.

"Two are regarded as particularly important. They are the approval of foreign memberships and the later closing hour. In memberships, the securities market begins with the same extensive foreign contracts enjoyed in our other departments. This should aid materially in making the board an influential world market in securities."

Many of the previous rules have been clarified and simplified. Committee duties are enlarged and new committees created. The rules strengthen regulations on admission to the floor of the Board of Trade. And New York's high standards in the listing of securities are closely adhered to.

Financial leaders throughout the nation are watching the new development with keen interest. The Board of Trade, together with the New York Stock Exchange, have long been recognized as the world leaders in their respective fields. And now that the board has added securities to its already immense range of commodity trading, its opportunity to become first in the world is significant and real.

Bills before the Illinois state legislature which will give the necessary power to the Board of Trade to undertake business like the New York Stock Exchange were favorably received. An impressive group of Chicago's largest bankers gave their strongest support to the measures, as the enlarged market of the Board will greatly benefit Chicago and the middle west as well as itself.

The including of securities trading has served to emphasize the diversity of interest for which the Board of Trade is noted. Newcomers since the security market took shape include advertising executives, commission house, automobile men, architects, bankers, lawyers, brokers, capitalists, engineers, importers, jewelers, manufacturers, merchants, public utilities, radio and real estate. No longer are the grainmen alone.

The canny men of La Salle Street, grand canyon of the middle west, freely state their belief that seats on the board will shortly rise from the present \$40,000 to \$100,000.

PORTLAND EXCHANGE ELECTS

At a meeting of the stockholders of the Portland Grain Exchange held recently, organization was completed and the following were elected directors: A. M. Chrystal, of Balfour, Guthrie & Co.; Phil Benedict, Kerr Gifford & Co.; Sherman C. Draper, Albers Bros. Milling Company; W. A. Kearns, H. W. Collins; A. E. Sutton, Strauss & Co., Inc.; W. L. Wilson, Louis Dreyfus & Co.; Harold Sanford, I. C. Sanford Grain Company; S. E. Mikkelsen and Mark P. Miller, Terminal Flour Mills Company.

Meeting of the Board of Directors immediately following. A. M. Chrystal, who has been temporary chairman on organization, was elected president; Phil Benedict, vice president; Sherman C. Draper, secretary; and W. A. Kearns, treasurer.

Copies of the by-laws as revised were issued to stockholders present. Several changes in these were requested by the grain futures administration, and the revised by-laws have been forwarded to Washington, together with a request for a permit to operate a grain futures market.

The Portland Grain Exchange will operate in quarters of the Merchants Exchange, but will be a distinct organization. Thirty-six members have joined the Portland Grain Exchange with several more expected to sign up before the market is opened. Trading months will be March, May, July and December, and it is hoped to obtain a permit to operate in the options beginning with the May.

CHICAGO MARKET TREND

Wheat ruled rather quiet with operations confined largely to local interests. The trade appear to be in the mood to await action by Congress on the farm relief question, and news bearing on that subject has temporary market effect. Sales here for shipment were fair, and the Seaboard again reports

a liberal business in Manitobas for export, mainly to the United Kingdom. Weather conditions remain favorable for the growing crop.

Corn experienced a very dull trade within exceptionally narrow limits, responding in a feeble manner to the fluctuations in wheat. Small "to arrive" sales by the country and light receipts failed to have a bullish effect, being offset by the continued disappointing sales for eastern distribution and the small out movement from here; in consequence, local elevator stocks fail to decrease as is highly desirable at this season.

Changing operations in oats between May and the distant futures constitute a large part of the trade. Sales for shipment only fair. Carlots in good demand, basis vs. futures about steady.—*Doern-Scarritt-Hannah Company, Chicago, Ill., market letter of April 11.*

CHANGES IN MEMBERSHIP

Chicago.—Memberships transferred on the Board of Trade are: John T. Schenck, Harry Sincere, Edward C. Freutel, George J. Ohlenroth, Paul M. Becker, John K. Dorrance, Harry B. Slaughter, Edmund C. Coultry. Admitted to membership: Leonard S. Florsheim, Lawrence F. Stern, Frank W. Ramey, John Hausmann, Charles H. Chandler, Simon Boekman, Alfred I. Preston, Jr., Carl A. Swanson. Changes in registration made: Charles B. Lindsey now for own account instead of assistant manager for Pellat and Pellat, Ltd., Toronto; William Simons now vice-president, Hauer-Wurzburg & Co., Berlin.

Duluth.—In Board of Trade: C. C. Cook; out: D. C. Moore. Elected: C. C. Ritten, on membership of father, Louis C. Ritten.

Kansas City.—Admitted to Board of Trade: Edward C. Cayce, buyer for Purina Mills.

Memphis.—New Merchants Exchange member: C. R. Garner & Co., Amarillo, Tex.

Milwaukee.—New Chamber of Commerce members: Lawrie and Larson, grain dealers, on membership of James Lawrie. Elected: Walter Baujon, representative of Beach-Wickham Grain Company of Milwaukee.

Minneapolis.—Acquired Chamber of Commerce membership: Douglas Moore, wheat buyer for Pillsbury Flour Mills.

New York.—Elected to membership in the Produce Exchange: James Seligman, Max Straus of the William E. Lauer Company, both stock brokers; Thomas P. Hasler, Arthur G. Jenssen, W. DeF. Wright, Jr.

St. Louis.—Merchants Exchange transfers: William Berger and R. G. Graham, both of the Dannen Hay & Grain Corporation, on transfer of R. M. Guenther and W. H. Baldorf (Belleville, Mo.), respectively; Woodson K. Woods, Jr., son of the vice-president Ralston-Purina Company on certificate from R. M. Guenther.

TERMINAL NOTES

Indianapolis grainmen are co-operating in the re-establishing of Indiana and the Central States as a strictly Soft Winter wheat area.

The Senate Agricultural Committee, hearing much on farm relief, will hear C. W. Lonsdale and F. C. Hoose, representing the Kansas City Board of Trade.

New vice-president of the Denver Grain Exchange is George T. Russell, heretofore an Exchange official and manager of the Longmont (Col.) Milling & Elevator Company.

To have a car of grain sampled by the Kansas City Board of Trade sampling department now costs 45 cents, five more than heretofore, following an increase the first of the month.

St. Louis Merchants Exchange seats are selling at \$1,035, an advance of \$800 within six months. Reason: prospective stock trading. It was paid by the Dannen Hay & Grain Corporation of St. Joseph, Mo.

New Milwaukee grain firm is Lawrie and Larson, formed by James Lawrie and Morton L. Larson, both formerly associated with W. G. Moorhead & Co., and the former a Chamber of Commerce member

since 1904, which membership he transfers to his firm. Mr. Lawrie will be traveling representative for Lawrie and Larson as he was before for Henry Rang & Co., and W. G. Moorhead & Co.

Satisfaction will be felt by many a grainman if the Hoover Grain Company, Minneapolis, wins its appeal to the supreme court of North Dakota for refund of taxes on income from grain bought in that state but sold in Minnesota.

Herbert C. Hoover is the signature on a photograph of the President in the (proud) possession of Chicago Board of Trade Legion Post No. 304. Personal Hoover bodyguard Henry M. Corcoran had it presented to him. He is the Americanization officer of the post.

Kansas City Board of Trade's grain pit will be moved to the west end of the building, and into the east end will be put seats and appliances for securities trading, to begin June 3. Thus segregated, members may unconsciously deal in grains or outstanding local securities.

The Security Committee of the Kansas City Board of Trade is composed of James N. Russell, chairman; George S. Carkener, vice-chairman; George H. Davis, E. O. Bragg and Paul Ullmann, while Walter R. Scott, board secretary, will manage the securities department.

Confusion recently spread over trading in the non-voting class A and voting class B shares of Ford Motor Company of Canada, Ltd., because traders weren't certain which was which. The New York Produce Exchange participated in both the market and misapprehension.

Donahue-Stratton, Milwaukee grain firm, now has a total storage capacity of 10,000,000 bushels, following acquisition recently of a million-bushel elevator in St. Joseph, Mo. The other 9,000,000 capacity is found in two Milwaukee, two Chicago, two Portland, Ore., and one Georgian Bay, Ont., elevators.

Five hundred-thousand dollars is the capitalization of the subsidiary company formed by the Kansas Co-operative Wheat Marketing Association to acquire and build country elevators, to accommodate the coming crop, and ultimately to acquire terminal elevators, according to E. R. Dowie, manager of the association. Wichita is headquarters.

"This increasing interest is important to grain exchanges—for as knowledge of the trading practices of the boards of trade grows a great number will utilize our markets to hedge their crops against swings in price," said Chicago's Board of Trade president, Samuel P. Arnot. The occasion was in calling attention to the attendance, during six weeks at the Board of Trade, of 354 ruralist-spectators from all parts of the Middle West.

The name, Salyards Grain Company (established 1894), Minneapolis and Milwaukee, now means also the W. P. Devereux Company (established in Minneapolis in 1894), for these two firms have consolidated. D. F. DeWolf, former Devereux officer, goes to his company's Lewiston, Mont., office, to be operated under the consolidation name. Salyards officers are: H. F. Salyards, president; Ely Salyards, vice-president; Carl Hofmister, manager and treasurer, and C. U. Stone, secretary.

GRAIN GROUPS STAND BEHIND HOOVER FARM RELIEF PLANS

The house committee on agriculture heard early this month wholehearted expression by the grain exchanges of their approval of the Hoover farm relief program. F. E. Wells, primarily appearing for the Minneapolis Chamber of Commerce, spoke for the exchanges, saying that he was authorized to do so by the Chicago Board of Trade, the New York Produce Exchange, Duluth Board of Trade, St. Louis Merchants Exchange, Kansas City Board of Trade and Omaha Grain Exchange.

"While I do not believe that legislation can cure all agricultural ills," stated Mr. Wells, "I feel confident that if the producers will assume their share of responsibility, and if they are given the assurance of a farm board of ability, the condition of

agriculture can be greatly improved through legislation of this character."

In advocating the creation of a farm board, Mr. Wells said there should be commodity advisory councils and stabilization corporations. Government loans should be granted to the stabilization corporations and to co-operatives, he approved.

"I can assure you that, as far as is consistent, the grain trade and the leading markets of the country will co-operate with the farm board and other agencies to see that this experiment receives a fair trial.

"Unless the measure is administered on sound business principals its failure is inevitable," he said. "The success of the program suggested depends entirely upon two factors: the character and ability of the individuals on the farm board, and the willingness of producers to organize and, through advisory councils, to place before the board a statement of their problems and suggestions for relief."

Asserting that nothing should be done to endanger the present marketing agencies, and in particular the futures market, until the success of the scheme was positively demonstrated, Mr. Wells said that the proposed legislation will be entirely experimental.

"If you agree with me that all agricultural relief legislation is of necessity experimental," he brought

the *Blanchard* was made into a floating elevator.

But almost as swiftly she became a harbor joke, and sullenly retorted by sinking to the bottom, hiding herself in the mud. Somebody pumped her out, re-floated her and towed the resurrected hull to Bidwell Bay, north arm of Burrard Inlet where the *Blanchard* joined other relics, stripped of gear and elevator, naked as the day she slipped down the ways, engineless.

At Bidwell Bay the *Blanchard* and her crazy sisters proved only a gaunt moral of profligacy done. Now somebody has saved her from the rot. She is being made into log barge, hardly less elegant, anyway, than the unrequited ambition to be a wooden steamship.

PRESIDENT HOOVER WELCOMES GRAIN TRADE SPOKESMEN

Before assembly of the special farm relief session of Congress this month, 10 grain trade representatives from nine different states, conferred with President Hoover at the Whitehouse in Washington, D. C., to discuss pending legislation and its probable effect on the independent grain dealer.

Among the grain trade organizations represented were the Grain Dealers National Association, by its



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GUESTS OF PRESIDENT HOOVER AT THE WHITE HOUSE

LEFT TO RIGHT: JAMES L. KING, PHILADELPHIA; CHARLES QUINN, TOLEDO; E. H. SEXAUER, BROOKINGS, S. D.; C. C. LEWIS, BUFFALO; W. E. CULBERTSON, DELAVAN, ILL.; A. S. MACDONALD, BOSTON; P. E. GOODRICH, WINCHESTER, IND.; W. T. BROOKING, ST. LOUIS; D. O. MILLIGAN, DES MOINES; E. C. EIKENBERRY, CAMDEN, OHIO; C. C. BELZ, CONRAD, IOWA.

out, "and that the success or failure of any plan cannot be foretold, you will also concur in my conviction that until the success of any plan is demonstrated nothing should be done which would in any way jeopardize our existing marketing agencies, including especially our futures markets."

The house committee has ordered the drafting of a tentative bill, following hearings from many witnesses, including farm group heads, Mr. Wells and A. J. MacPhail, of Regina, Sask., of the Canadian Wheat Pool, who stated that his pool had successfully stabilized prices and handled 52 per cent or more of the wheat from three western provinces.

SHIP—ELEVATOR—LOG BARGE

Europe was seething with the noise and fire of war. On the sea frightened ships scudded, fretting over submarines. While Lake Washington, in the State of Washington, seethed with the noise and fire of shipbuilding, answering the cry, "Ships! More ships!"

Those were the profligate hours of 60-day wooden ships, cranky hulls crazily answering a crazy purpose. In the last red year the hull of the *S. S. Blanchard* was laid down. But the war ended before she was done; the *S. S.* prefix was never attained. When she found herself in the first throes of the grain trade back in those tumultuous moments,

president and secretary, Messrs. MacDonald and Quinn; the Illinois Grain Dealers Association by Secretary Culbertson; the Western Grain Dealers Association, by its president and secretary, Messrs. Belz and Milligan. Their call at the Whitehouse was more of a friendly visit than an attempt to further clarify the independent grain trade's views on the revamped McNary-Haugen Bill.

It is apparent that the agricultural committees of both Congressional houses already have the general form of the new farm relief bill well in mind. The measure, when presented to President Hoover, will offer as its chief feature the creation of a Federal farm board. Broad authority will be given this board to declare the existence of surplus in various farm commodities, and to set up machinery to control, in a measure, the marketing of surplus grain and other crops. The equalization fee plan, however, by which the cost of marketing surpluses would be collected at the elevator and mill, is definitely out of the picture. Its omission is due, in no small part, to efforts of the independent grain trade spokesmen at Washington in this and former years.

Another feature of the pending legislation to relieve farmers will relieve the Federal treasury of perhaps a half-billion dollars. This sum will be a revolving fund to be at the command of the board in its effort to hold up prices when excess production occurs. The administration also favors setting aside cash to revive co-operative marketing projects.

ANTI-FRICTION BEARINGS IN THE ELEVATOR

By C. W. GUSTAFSON, Chief Engineer Mutual Fire Prevention Bureau

Possibly the article on "Roller Bearings in Grain Elevators", written by Mr. James F. Hobart, under "Hints for the Elevator Millwright" which appeared on Page 532 of the March 15 number of your journal, will leave with some of your readers an impression that it is not profitable to install roller bearings in grain elevators. This was the impression it left with us and having a decidedly different idea we felt challenged to take issue with Mr. Hobart.

Mathematics can be so operated as to show a profit where there is really a loss or even that one is equal to two. Consequently, our faith in mathematical calculations as a method for determining whether or not one can profitably replace plain bearings in an elevator with bearings of the anti-friction type is not great. We would much rather base our decision on the difference in power bills before and after.

Reports have come to us from many parts of the country on this subject and to date nothing but enthusiastic statements of power savings effected have appeared. Some elevator operators report power savings ranging from 15 per cent upwards which is somewhat greater than the 10 per cent used in Mr. Hobart's calculations. One typical plant replaced 32 babbitted bearings with bearings of the anti-friction type. Before making the change, actual tests showed that their power consumption with average load was 45 kilowatts. After the change and under the same load conditions, the power consumption measured only 37 kilowatts, a saving of 8 kilowatts or 17.8 per cent. Hence, it appears that 15 per cent can be assumed as an average or probably even the minimum saving which may be expected. In this case, the cost of the new bearings installed was \$517.16, so the power savings alone showed them a return of 70 per cent yearly.

Insecure as is our faith in calculations on a thing of this kind, we are tempted to work through the case cited by Mr. Hobart, in which he used as an example an elevator in which four five-horsepower motors were installed.

First, when a motor is rated at five horsepower, it means that that motor will deliver five horsepower at the motor shaft. There being 746 watts to the horsepower, we will have five times 746 or 3730 watts of power delivered. No motor or any other machine is 100 per cent efficient, so to get 3730 watts out of the motor we must supply to it something more than this. Assuming an efficiency of 90 per cent, which is high if anything, we find that we must supply this five-horsepower motor 4,144 watts at full load. If the motor is in operation 10 hours per day, as Mr. Hobart assumed, our power consumption is 41,440 watt hours or 41.44 kilowatt hours per day. For the four five-horsepower motors the consumption is 165.76 kilowatt hours per day. Now, assuming our power saving effected by anti-friction bearings is 15 per cent, the saving in our power consumption becomes 15 per cent of 165.76 or 24.86 kilowatt hours per day. Power rates for country elevators vary from two cents per kilowatt hour to as high as 10 cents. In discussing power rates with elevator owners we have found that from five cents to six cents is a fair average. Let us assume five cents in this case and we find that our saving per day amounts to 24.86 times .05 or \$1.24, or more than 2½ times the savings shown in Mr. Hobart's calculations. Multiply this by the number of days per year the elevator is operated and we have the yearly saving. It is unnecessary to point out that such a saving represents handsome dividends on what it would cost to change from plain to anti-friction bearings.

There are so many other desirable features connected with anti-friction bearings that the consideration of power savings alone is decidedly unfair. Those who have attempted to start up elevator machinery on a cold winter morning when the shafting is literally glued into the plain bearings appreciate the easy starting afforded by anti-friction bearings. Having to climb up into a hot, dusty cupola

in the middle of a busy day to oil bearings is anything but pleasant. Contrast this with the convenience of anti-friction bearings which require lubrication not oftener than four times per year. As an added advantage consider the actual difference in cost of lubricating oil and labor for oiling.

What is also of great importance is the peace of mind which the elevator owner, whose plant is equipped with anti-friction bearings, possesses. He knows that the fire hazard incident to bearings has been reduced to a minimum if not altogether eliminated.

We can say without hesitation, and our convictions are born out by numerous letters and statements from elevator owners, that the installation of anti-friction bearings, either ball or roller in either an old or a new house, is decidedly profitable.

In closing, we might mention that this Bureau recently published a booklet on the subject of "Anti-friction Bearings for Mills and Elevators" which goes into the subject from all angles. Persons interested may secure a copy of this publication by addressing the Mutual Fire Prevention Bureau, 230 East Ohio Street, Chicago, Illinois.

10,000 MILES OF LEASED WIRES TO CARRY GRAIN PRICE NEWS

Expansion of the agricultural market news services of the Bureau of Agricultural Economics through the establishment of additional field offices in the Pacific Northwest and South, extension of the leased telegraph wire system, and increased activities at existing field offices engaged in the collection and dissemination of grain and other farm market news by radio, telegraph, the press, and by mail, has been announced by the United States Department of Agriculture. This extension of the service was provided for by Congress in the appropriation act for the year beginning July 1, 1929.

Expansion of the bureau's market news service includes extension of the leased wire system to Detroit; Cleveland; Nashville, Tenn.; Jackson, Miss.; New Orleans; Portland, Ore.; Seattle; Spokane; and Boise, Idaho. Leased wire connections at Nashville, Tenn.; Jackson, Miss.; and Boise, Idaho, will be for the purpose of distributing market reports on grain, hay and feed, and other farm commodities. Through co-operative arrangements with the state departments of agriculture in several states, the material available on the leased wire system will be disseminated from those points by state agencies and by the use of the press, mail, radio, and other means.

Extension of the leased wire service to the Pacific Northwest will make available to that important producing section comprehensive market reports on fruits and vegetables, dairy and poultry products, grain and hay.

The bureau contemplates also that the grain and hay market news service will be further expanded by opening an office at San Antonio, Texas, in order to serve the Southwest, and expects to station a representative of this service at San Francisco.

When the market news service was established by the Department of Agriculture nearly 15 years ago, the major portion of commercial farm products moved to consuming markets by rail, and it was a relatively easy task to keep tab on the volume of shipments and their disposal in market centers. A nation-wide system was established whereby division superintendents of railroads report to the Bureau of Agricultural Economics the daily loadings and movements. Nowadays a large proportion of the farm supplies is moved by motor truck, and the volume of rail receipts alone is no longer representative of the entire market situation. The Federal marketing experts are now at work on the problem of developing an adequate system of reporting truck as well as rail shipments and receipts.

Completion of the market news extension plans will place in daily operation more than 10,000 miles of leased telegraph wires from Coast to Coast, into the Northwest, the Southwest, Southeast and South. Headquarters of the system are at Washington, D. C., where a battery of operators are in constant

communication with the 40 branch offices which have drops from the leased wire. At any time of day each branch office and Washington headquarters have a complete report on prices, shipments, and the market situation in practically all the leading consuming markets of the country. Each office during the day secures wide dissemination of the local market conditions and conditions in competing markets by means of radio, the press, telephone and mail. This system in conjunction with the bureau's foreign crop and market news service makes it possible for farmers to obtain practically instantaneous reports on the markets for all the principal agricultural commodities.

STATES MAY HAVE NEW TAX PRECEDENT ON DEALERS

Supposing you bought grain in one state, where you regularly employed a staff of helpers to do the work, and sold it in another state, where, it would seem logical enough, your profit was actually made. Suppose also that you were incorporated in the state in which you bought the grain, though you never sold any there.

Would you consider your profits taxable by the first, or buying-source state? Would you consider your profits only taxable in the state where you sold the grain?

Such were the facts behind the case of the Hoover Grain Company versus T. H. Thorensen, tax commissioner for North Dakota.

In 1925 the Hoover Grain Company paid a tax of \$1,407.38 upon that part of its income received from business done in North Dakota. Then it sought a rebate which was denied. The Burleigh County, N. D., district court upheld the position of the tax commissioner and the appeal was taken from its decision. Now the case is before the state supreme court.

Says the Hoover Grain Company in its contention: This is a commission firm and none of its profits were received in North Dakota as all of its grain was marketed, sold, at Minneapolis and Duluth, Minn. Therefore its profits are not taxable in North Dakota.

Contents Tax Commissioner Thorensen for the state: The plaintiff is a North Dakota Corporation, with home offices in Grand Forks, protected by the laws of the state. It paid out thousands of dollars in salaries and expenses to employees within the state. Therefore, because a part of its business is carried on in the state that part should be taxed.

The Supreme Court of the State of North Dakota can, obviously, put logic into a decision either way, according to its lights and abilities within past practices.

WANTS FOURTH CONTRACT GRADE FOR WHEAT

Testifying before the Saskatchewan Royal Grain Inquiry Commission, which was recently in session in Winnipeg, E. R. Ramsay, secretary and manager of the Canadian Co-operative Wheat Producers, Ltd., made some interesting suggestions, according to information received from J. Richards, American Trade Commissioner at Winnipeg. Among other things he recommended a fourth grade.

The qualifications for No. 2 wheat would then be tightened up and grain unable to make the new No. 2 grade would go into No. 3 together with the best of the present No. 3. The balance of the present No. 3 together with the best of the present No. 4 would form the new No. 4 Northern grade.

Mr. Ramsay also suggested that Nos. 1 and 2 Amber Durum should be more clearly defined giving them a standard standing; that there should be an addition to the statutory grades to take care of "spreads", a slight raise in the percentage of moisture content allowed if it could be done with safety; a "splitting" of tough grades; the adoption of a standard for outgoing cargoes of 75 per cent of the average and 25 per cent of the minimum passing primary inspections. Mr. Ramsay also spoke highly of the work of the automatic sampler.

TRADE NOTES

The cone shaped grinders of the Bowsher Combination Mills, made by the N. P. Bowsher Company of South Bend, Ind., use a principle which has been in constant favor since the engineers of Rome and Pompeii evolved it more than 2,000 years ago. That principle is as true today, and the company would be glad to describe fully what it can do in the economical grinding of feed.

The American Dry Milk Institute of Chicago, which has spread the gospel of milk solids in human food and in feeds, to the lasting benefit of consumers, be they humans or animals, is having a meeting at the Palmer House, Chicago, on April 25-26. Those who are interested in what dry milk really contributes to the nutritional value of feeds will be welcome and will learn much.

If a customer should ask you for a feed which would check nutritional abortion in his herd you could answer with confidence the Hoosier Yeast-mineral, made by the Hoosier Mineral Feed Company of Greenwood, Ind., would do the trick. In fact it is such an all around valuable ingredient of any feeding combination that you would do well to learn more about it from the company.

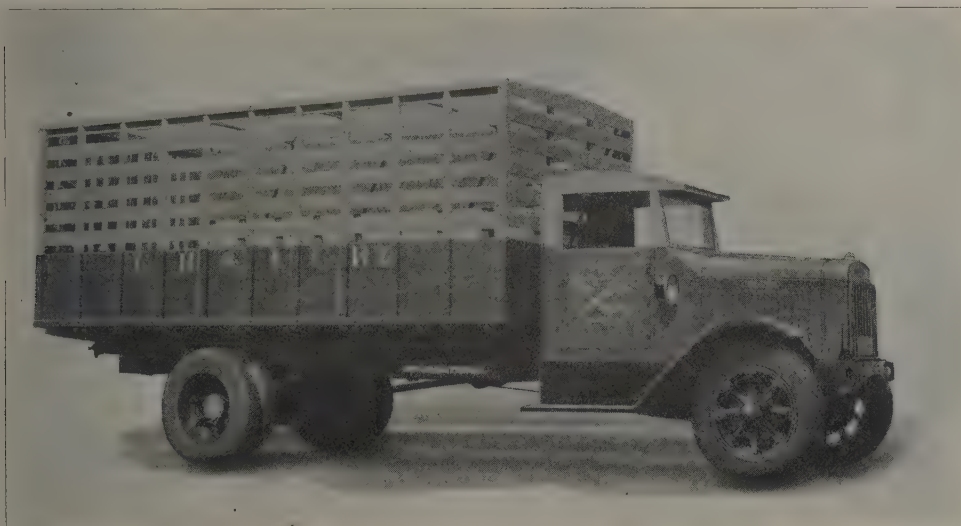
The Link-Belt Company, 300 W. Pershing Road, Chicago, Ill., specialists in economical transmission, now has branches in 30 cities in the United States, and under the name Link-Belt Limited, three in Canada. There is no location in the country that is

rupted spirals, in fact a conveyor to move any kind of commodity at any speed desired and with any amount of mixing. In addition there are conveyor boxes, drives of all sorts, hangers, saddles, screens, and everything else connected with or used with a conveyor. You men who have a grain or stock conveying problem or a feed mixing problem would do well to have this catalog on your shelf. The answer is there.

The Morse Chain Company, of Ithaca, N. Y., has just brought out a new publication, Bulletin No. 35, devoted to stock sprockets and chain which are being carried in various localities. The data is arranged in an ingenious way, allowing the customer to select two or three different designs to meet his specifications, one of which may be most suited to his requirements. It is due to the increased demand for service that these drives from 1 to 25 horsepower are being added. Morse Silent Chain Drives are carried in stock by the following: Carolina Supply Company, Greenville, S. C.; Crago Gear Company, Kansas City, Mo.; Dodge-Newark Supply Company, Newark, N. J.; James Supply Company, Chattanooga, Tenn.; Moore-Handley Hardware Company, Birmingham, Ala.; Morse Chain Company, Detroit, Mich.; Morse Chain Company, Ithaca, N. Y.; Tranter Manufacturing Company, Pittsburgh, Pa.

WHAT'S NEW IN TRUCKS

First consideration in the private transportation question of the dealer's business is what truck will be most suitable. Generally speaking, a truck both



INTERNATIONAL TWO AND A HALF TON MODEL, STAKE BODY

not within a short distance of a Link-Belt office and every one of them is equipped to take care of your transmission requirements at once.

Everything new from aspirators to wire cloth is included in the condensed catalog for 1929 of the Sprout, Waldron & Co., mill machine makers of Muncy, Pa. Turning the pages reveals several new, worthwhile improvements as well as entirely new machines. Among the newly offered is a rotary wheat cracker which cracks to the fineness desired for chick feed without retaining the berry so long that it becomes pulverized, a nice feature achieved by not making the cracking cylinder too long; there are convenient adjustments. The arrangement of the catalog appeals to anyone who enjoys decent printing, it permitting easy and intelligent perusal.

Under the mistaken notion that spiral conveyors were just spiral conveyors differing in size, perhaps, and in the angle of the spirals or flights, we picked up the new catalog just issued by the Weller Manufacturing Company of Chicago, which is numbered 36D and called "Spiral Conveyors." We were surprised. The book of 77 pages is beautifully illustrated with conveyor installations in plants of many industries and shows conveyors for every purpose with open and closed flights, continuous and inter-

swift and powerful that is easy to handle, economical and not too big, answers the purpose.

Inspection of the new two and a half, three and a half and five-ton International line proves them very appropriate to the dealer. While there are fewer dealers who can employ a five-ton truck efficiently, the other two mentioned would probably prove better in many cases than too light a vehicle, especially where there is no escape from overloading. The trucks referred to have four-wheel brakes, vibration dampeners on clutches (single dry-plate) and the now popular five speed forward, two reverse transmission. In the writer's opinion, a five speed transmission will save the life of many a truck, making high speed practical and emergency power certain. The engine of the International is a good, clean job, four cylinders with overhead valves and camshaft. Lubrication is modern, through an oil pump, supplying all moving parts. What trucks have been a long time coming to in the way of comfortable, hence efficient, cabs is here available. The steering is all it should be. Chassis design shows a generous use of good steel, strong construction by the International Harvester Company, Chicago, Ill.

Prompt deliveries of products ordered out of elevator sideline stocks help bring resales. Realizing this, dealers are giving trucks careful attention.

V-BELT DRIVE FOUND USEFUL

Perhaps every drive, but those few most obvious ones, demand some thorough debating before the correct drive is fitted. Any debate must take into consideration the V-belt drive, one that makes possible the use of short centers with higher speeds, requires no lubrication, is practically silent and vibrationless.

In the first place it requires little floor space for

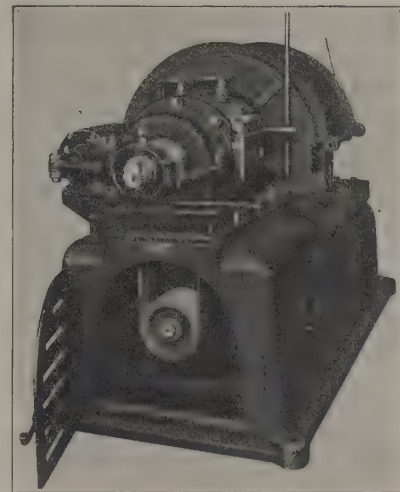


FIG. 1

efficient driving. The total belt tension is said to be about that of the driving tension, due to the wedge action of the belts which practically destroy any tension on the return side of the belts. Figure Nos. 1 and 3 show a set of sheaves and belts for a typical drive, and a short center vertical drive (ever a hard one), respectively.

Its silence, vibrationless and high speed qualities are accounted for in the construction of the

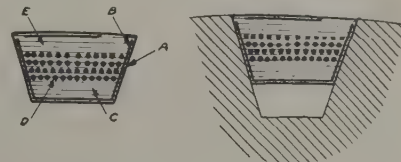


FIG. 2

belt as well as in the way it grips the sheaves. Figure No. 2 shows the construction: Belt is built up of duck, as shown in A and B, in which is a special compounded rubber, C and E, and layers of cork, D. The rubber improves the wearing quality of the duck, and that below the cork in the bottom is compounded to withstand compression; the upper stratum is compounded for withstanding tension. The cord is fabricated from staple cotton, similar



FIG. 3

to that used in automobile tires, and the entire belting is vulcanized together on the same principle. And it performs work not unlike that done by automobile tires.

The sheaves are of semi-steel, designed to accommodate the belt with maximum efficiency and permitting a gradual contact as the belt slips into them. The elasticity of the belts prevents grabbing and shocks.

V-drive equipment, as described above, is supplied by Fairbanks, Morse & Co., Chicago, Ill.

WHEAT WARNING BY BAINER

While the Southwest is known for its wheat and can afford to be proud of it, southwesterners should not rest on their laurels when the quality and yield of wheat can easily be made better. This is the suggestion made by Director Bainer of the Southwestern Wheat Improvement Association.

Elevator owners and millers, by lending support to the better-wheat drive in the Southwest, will benefit the farmers as well as the wheat market, Mr. Bainer declares. The drive involves a continuation of propaganda directed to the farmer from the grain trade and from other sources, urging use of better seed wheat, rotation of crops, early preparation of seed beds and the revitalization of soil by fertilizers.

MORSE DRIVES IN POOL ELEVATOR

The Saskatchewan Pool Terminal No. 7 at Port Arthur, Ont., even with its enormous capacity of over 7,000,000 bushels, is barely large enough to handle all the grain that is sent to it from the hundreds of country elevators of the Saskatchewan Co-operative Elevator Company, which operates it.

When this elevator is in operation the power required to run its elevators, conveyor belts and numerous other machinery is enormous. Over 175

the belt from the pulley, and by friction of the atmosphere on the belt. The principal source of friction under normal operation conditions, according to the engineers, is the separation of the belt from the pulley.

Whenever two dissimilar materials that have been in contact are separated, a static charge is produced on each object, under certain conditions. In the case of a belt there is a continual separation, and charges are generated on the belt and on the pulley. The pulley is commonly a conductor of electricity and if the machine is grounded the charge will not remain. The belt, however, is usually a non-conductor, and the potential may under some circumstances build up until sparking occurs.

BELT PLUS DUST MAKES EXPLOSION HAZARD IN GRAIN PLANTS

If explosive or inflammable gas or dust is present explosion or fire may follow. Several methods of removing this electrical charge have been devised, but without entirely satisfactory results. In the recent experiments, Mr. Edwards and Mr. Reed worked with the assumption that a metallic belt would eliminate the trouble because it would be a conductor of the electrical charge and this would prevent the formation of the electro-static charges or would neutralize them as rapidly as they were formed. A metallic belt is not feasible, so they endeavored to find a method of making a rubber or

in indicating methods for the reduction of the explosion hazard in many industries in which dust and vapors are present in the course of manufacturing operations, and the researches have been extended to include a wide variety of general fire problems. The present announcement of a method for the elimination of static electricity is being made concurrently by the National Fire Protection Association, which is co-operating with the engineers of the Government.

BARNARD & LEAS REORGANIZE

At a board meeting of the Barnard & Leas Manufacturing Company recently held, A. R. Weigle, formerly president of the Velie Motor Company, was elected president. New directors were also elected, and W. S. Brashear was made sales manager. He has been with the company 35 years in its Southwestern territory and home office.

Reorganization plans do not affect the financial status of the concern, but call for a new, aggressive sales policy and enlargement of its manufacturing program to include a full line of milling machinery. The new board of directors includes several from Moline, Ill., Barnard & Leas' home city.

One of the new products which will be offered by the company is the Vix-Lifter, a grain door opener which will remove the complete grain door in less than two minutes and is so small and simple that it can easily be handled by one man. Car doors, without a proper tool for removing them, are stubborn, vicious time stealers, so this announcement will be of interest to a great many elevators and mills.

The Barnard & Leas Company has sold the Barnard Mill Furnishing company of Spokane to A. L. Carter and E. K. Miller who will operate as the Carter-Miller Mill Furnishing Company. This Spokane concern will continue to handle the Barnard & Leas line of machinery and will carry a complete stock of parts, but the transfer will aid in the consolidation and strengthening of the 69-year-old Moline concern.

NETHERLANDS GRAIN PIT HELPS TRADE

Rotterdam's position as the port of arrival for the grain import requirements of the Netherlands and a large part of Central Europe, was maintained throughout 1928 although total transshipments of grain for the Rhine district were somewhat less than the year previous, according to a report from American Consul Albert M. Doyle at Rotterdam. The port has unexcelled facilities for the transshipment of grain from ocean steamer to barge or elevator. A recent development of this trade, attributed to the growing importance of the wheat and corn futures markets at Rotterdam, has been the increased demand for elevator space.

POOL LAWYER PONDERES BILL FOR HALF-MILLION

The Canadian government has presented a bill for \$456,632.69 to the Saskatchewan Wheat Pool which is alleged to be at least that much in arrears on income tax payments. Attorneys for the Dominion, marshalling their evidence before Justice Audette, in the Court of the Exchequer at Regina, Sask., argue that reductions from the price of grain made by the pool for its reserve funds, constitute taxable income.

O. M. Biggar, pool lawyer, thinks a bigger way of looking at the matter, is to consider that pool reserve funds are simply held in trust for growers. But the government asks why corporate funds of a wheat pool should not be treated the same as the surplus of any other commercial organization.

THE fat content of wheat farina makes it susceptible to ultra-violet rays, which impart vitamin D to it. About a third of the wheat tonnage consigned to the Quaker Oats Company plants now is irradiated after being milled.



SASKATCHEWAN POOL TERMINAL NO. 7 AT PORT ARTHUR, ONT.

motors supply 5,736 horsepower, and there is more than 6.7 miles of belting. Helical gears and Morse Silent Chain Drives convey the power from the motors to the machines or the shafting. There are 72 Morse Drives in the plant and the uninterrupted flow of grain through the house since it was opened for the new crop last fall, speaks volumes for the efficiency and dependability of these drives.

STATIC LOAD OF BELT FOUND TO BE 40,000 VOLTS

Relative safety from dangerous explosions and such fires as are often ignited by static electricity when it is generated by the moving belts of machines may be assured as the result of research work carried on in the laboratories of the United States Department of Agriculture, it is announced by David J. Price, in charge of the Chemical Engineering Division of the Bureau of Chemistry and Soils. P. W. Edwards and J. O. Reed of the bureau made the investigations.

The results of this research, Mr. Price points out, are applicable to industry, and particularly to industries such as the grain trade, in which the hazard of inflammable dusts prevails. Static electricity is generated on a moving belt, and the voltage may sometimes be considerable. One of the belts used in the experimental tests of the new method registered a potential of 40,000 volts. The charges may be built up by one or all of three methods. Friction of the belt on the pulley, the separation of

leather belt a conductor of electricity. They sought a material which could be applied to the belt and which would have sufficient electrical conductivity to remove or neutralize static charges as rapidly as they are formed.

After many trials they found that if a conducting powder such as aluminum, bronze or copper were added to a good grade of spar varnish used to hold the powder on the belt the conduction of rubber belts would be adequate. Lamp black, which is finely divided carbon proved to be the most practical conducting dust, and spar varnish, the thinner of which consists of a mixture of mineral spirits and carbon tetrachloride gave a preparation which would not flame and cause a fire risk. This has proved to be a satisfactory non-static dressing for rubber belts, but not for leather.

DRESSING MAKES BELT SAFE

A dressing for leather belts consisting of liquid fish glue, glycerine, sulphonated castor oil, water, lamp black, and ammonium hydroxide has considerable merit, the engineers say, and it can be applied while the belt is moving. If the belt has not been well cared for before the non-static dressing is applied it may cause the belt to stretch, and several applications may be required before the belt will give entirely satisfactory service.

These experiments were the outgrowth of work undertaken by the Department of Agriculture to reduce the number of fires and explosions in farm machines and in industrial plants. The research work done in this connection proved of equal value

NEWS LETTERS

INDIANAPOLIS

H. M. RUDEAUX CORRESPONDENT

RECEIPTS of corn and oats are keeping up beyond expectations in this market, in spite of the early activities on the farms. It is said, however, that 60 per cent of arrivals are moving from other terminal markets, attracted by better prices. Consignment advices are very poor at this time, caused probably by bad roads which prevent farmers from hauling their grain. Arrivals are readily absorbed, even though cash prices on corn and oats do not advance in relation to the May option as fast as they ordinarily do.

Corn is moving in freely even though a large portion of last year's crop is still in the farmer's hands.

Oats are firm, and receipts are fairly heavy for this time of the year. Most of the arrivals continue to grade No. 3 White on account of color, which seems to be the only drawback, and only few cars of No. 2 White oats make their appearance.

The arrivals of wheat continue very light, and the demand continues erratic. The quality and type of wheat as well as the billing, is being given careful consideration by buyers, with local consumers almost entirely out of the market.

Recent germination tests have revealed that a large percentage of oats and barley harvested last fall are not suitable for sowing. Fifty per cent of the barley crop was affected with scab and made useless for planting, while oats were affected similarly. Cause is attributed to heavy rains during harvest time last year.

Indiana farmers held more than a third of the last year's corn crop still on their own farms March 1, according to figures compiled by the department of agricultural statistics of the Department of Agriculture and the Purdue University agricultural experimental station. The farmers still had 56,463,000 bushels, which is a third more than last year. Hoosier farmers usually feed about 85 per cent of their corn to live stock.

Following the largest crop in the history of the state, farm holdings of oats are the largest since 1921. Present stocks are 265 per cent of a year ago, and 159 per cent of the 10-year average. Barley stocks are the largest since 1921, being more than three and a half times those of a year ago, and more than double the 10-year average. Farm holdings of rye are only 42 per cent of a year ago.

A committee of the board of governors of the Indianapolis Board of Trade has been named to make a study of the proposal that a stock exchange be established as a part of the Board of Trade.

The committee has been selected by Mark H. Miller, president of the board, and will report its conclusions to the board of governors for final action. Committee members include E. Clifford Barrett, chairman; Roy Sahn, Edwin J. Wuensch, O. A. Wilkinson and Jesse H. Blair. The stock exchange department, or securities department handling security investments has been under consideration by members of the Board of Trade for some time, it was said.

Indiana will have no enforced campaign this year against the European corn borer. This decision has been reached after a conference with entomologists and other state officials in Ohio and Michigan, where the corn borer has done extensive damage. Nor will Michigan and Ohio have such a campaign. Quarantine will be maintained in the infested regions and green corn can not be removed from such territory. If the borer is fought it will be by farmers acting for themselves. Though Frank N. Wallace, state entomologist, took many farmers to the infested regions of Canada

and showed them what damage the borer will do, objections to the clean-up persisted as they did in Michigan and Ohio.

If farmers neglect their fields the borer doubtless will take a long step westward, and the Illinois agricultural department is sending warning bulletins to farmers. Parasites that destroy the borer are in process of development, but this operation is slow.

Edward K. Sheppard, manager of the Cleveland Grain Company, represented the Indianapolis Board of Trade, at the recent Agricultural Fellowship Conference meeting in Toledo, April 3, sponsored by the National Milling Company. Mr. I. E. Woodward, of the Acme Evans Company, represented the Indiana Grain Dealers Association, on the Crop Improvement Committee. Other representatives from Indiana were: Don Jenkins, of the Noblesville Milling Company, and Prof. A. T. Wiancko, of Purdue University.

Several hundred farmers from Indiana, Ohio and Illinois met on Monday, April 8, at headquarters of the Central States Soft Wheat Growers' Association in the Indiana Farm Bureau Federation offices, for the purpose of electing 11 new directors. The new directors will meet and elect new officers at the session.

John P. Sims, 70 years old, retired grain elevator owner, died at Frankfort, Ind., March 31. Mr. Sims was interested in grain elevators at Forest, Stockwell, Wingate, Fowler, Frankfort, Royal Center, Seircleville, all in Indiana, and at Oakland, Ill. Survivors are a widow and five children. He was the father of Carl Sims, of the Sims Milling Company, Frankfort, Ind.

The demand for Timothy hay from southern points continues to be very good, and loadings are not sufficient to fill the demand. Bad roads have been a handicap to hay loading, but in spite of this prices have not soared any. No. 1 Timothy is bringing \$14@14.50 country points. Mixed varieties are firm with little demand.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

ANOTHER discouraging monthly report on trade has come from the Milwaukee Chamber of Commerce. Receipts for the past month have been very light all along the line and most of all in the corn department where heavier trade had been looked for. The supply of corn at Milwaukee for the past month was only 990,000 bushels as compared with 2,097,000 bushels for the corresponding month of last year.

What makes grain trading light? Milwaukee grain men say the same complaints come to a large extent from other grain centers, that it is more or less a countrywide case of small marketing of grain.

The intense winter cold and poor roads which were a feature of February and March weather were also set down as dominating factors in the decline in grain trade for the past month. Some predictions are heard that better grain marketing is more than likely to take place for the rest of the season. But this is by no means certain but Milwaukee grain dealers are hoping for the best.

Despite the very high rates for money and the fact that banks are tighter than ever in making loans for many purposes, the finance committee of the Chamber of Commerce has again determined to make the rate on advances 6 per cent as in previous months.

President A. L. Johnstone of the Milwaukee Chamber of Commerce reports that the time is not far distant when the Milwaukee grain board will be ready to open its new stock exchange. Mr.

Johnstone stated that Milwaukee now is one of the very few cities in which there is no trading in stocks on a local board.

"There is a great deal of interest and enthusiasm displayed in this project not only by our own members but by others as well," said Mr. Johnstone. "A committee of seven has been holding meetings every day or two for many weeks. Some may have felt that the committee has not proceeded rapidly enough but this is a time when we must make haste slowly as we cannot afford to make mistakes.

"To this end the committee has consulted with the legal department of the exchange, with the railroad commission at Madison, investigated other stock markets and interviewed stock and bond men."

Mr. Johnstone said that the new set of rules to govern stock trading is ready and will be submitted to the members very shortly. On this basis, he maintains, the new exchange will be opened soon.

The name of the Chamber of Commerce is expected to be revamped to a title something like the Milwaukee Grain and Stock Exchange.

The new building committee of the Chamber of Commerce is making excellent progress and will be ready to report very shortly on what has been done. President A. L. Johnstone says the committee and especially the chairman has done a vast amount of work, investigating properties and getting numerous estimates on the cost of remodeling and a new building.

The lease of the Chamber of Commerce on the present quarters expires on May 1, 1931. Consequently, there is a growing feeling that something should be done very soon as it would take more than a year to erect a large office building, in case it is decided to erect its own structure.

The memberships of the Chamber are constantly growing more valuable, due primarily to the moves made to start the new stock exchange. Estimates are now made that within a relatively short time the memberships should be selling for anywhere from \$2,000 to \$2,500 each.

At the close of the fiscal year just ended, the total membership in the association was only 268, including 257 living members, seven memberships of deceased members and four additional memberships. During the past year there have been 47 transfers of membership.

There were no forfeitures of memberships because of the failure to pay the annual assessment. The eight memberships which were forfeited for the failure to pay the assessment for the preceding year were sold by order of the board of directors and transferred to new members. This increased the membership by eight during the past year.

The board of directors has decided to continue the annual assessment of \$125 for the fiscal year beginning April 1, 1929. It has also been announced that an additional five dollars will be charged on each semi-annual installment of this fee in case it is not paid within 30 days after it becomes due.

Milwaukee grain men have a nice gratuity fund which is returning its members larger and larger returns. The total market value of the securities now held in this fund is over \$102,000.

The net income from the fund for the year was a little over \$4,300, so that the beneficiaries of the three deceased members of the group each received about \$925 as their share. This left \$1,572 as a reserve fund to meet future deficiencies. The fund is now held by the First Wisconsin Company.

The estate of Christian Kurth, maltster, who died recently, proved to be more than \$750,000 when his will was filed for probate in the probate court. After bequests amounting to about \$100,000 the balance of the estate will be divided into four parts. One part will go to the widow, Amanda, one part will go to Mrs. Leona Moore, a daughter, one part to Mrs. Ethel Haebler, another daughter, and one part will be placed in trust for a son, Herbert.

Repeal of the occupational tax offset on income taxes is asked in a bill introduced in the Wisconsin legislature by Senator Walter S. Goodland of Racine. The occupational tax which is assessed

against grain and coal companies amounts to about \$100,000 each year, a large percentage of which is being paid by Milwaukee grain dealers.

Only two boats are in Milwaukee this spring for the storage of grain, shippers declaring that the rates prohibit the bringing of the usual number of boats for this purpose. The *Norton* has been chartered by the Donahue Stratton Company and is now at the Rialto Elevator. This boat will carry out 325,000 bushels.

The Cargill Grain Company chartered the *Saturn* and this boat has been loaded with 330,000 bushels of oats. Both ships will carry the grain down the lakes at the opening of navigation. In previous years there has been from six to eight boats here for grain storage in addition to the elevators.

A survey is being conducted by the Association of Commerce industries division and waterways committee on restoring dry dock facilities and ship repair shops in Milwaukee.

Whereas in past winters Milwaukee had as many as 100 vessels tied up here for wintering and repairs, this business has been lost to the city. According to an investigation made by Chester Roberts, manager of the division, each of these vessels brought about \$15,000 to the city when dry dock repairs were required. An effort is being made to interest a new company in the erection of a dry dock and marine repair shops.

Some fairly large holdings of grain are reported at Milwaukee at the opening of the month of April with no less than 2,293,000 bushels of corn, a large total in view of slack grain receipts and small corn trade for March. The wheat holdings are around 484,000 bushels, the oats supply is over 513,000 bushels, the barley holdings are 453,000 bushels and rye supply is 536,000 bushels. This makes more than 4,280,000 bushels of grain in storage. A heavy movement of grain by lake is expected just as soon as navigation opens.

ST. LOUIS

FAIRMOUNT

CORRESPONDENT

THE grain elevators at St. Louis have been working full capacity, and have been doing a heavy business in transferring grain. At no time has there been any accumulation of grain in this terminal. Grain has moved freely both through the local elevators and for reshipment beyond. Shippers to this market are assured that their grain can be handled expeditiously.

Joshua M. Chilton, manager of the Checkerboard Elevator Company, grain merchandising department, was born at Eminence, Mo., in the year 1889 and is now 40 years of age. Mr. Chilton's business activities were ones of active progression. His first position was with the Missouri State Grain Inspection Department in St. Louis as grain inspector, with whom he remained for nine years, and was recognized as a very efficient grain inspector and a real specialist in grain inspection. He left the Missouri State Grain Inspection Department to accept a position with Morton & Co., grain merchants, with whom he was employed for one and a half years, resigning to accept an offer with the United States Department of Agriculture at Washington, D. C., remaining in that capacity for two and a half years. Recognizing his ability and knowledge of grain standards the Hall Baker Company of Kansas City employed him to take charge of their Denver, Col., office in 1921, later removing to St. Louis to open up a St. Louis office of the Hall Baker firm. When this concern purchased an interest in the Marshall Hall Grain Corporation he entered their employ as manager of the grain merchandising department.

The Ralston Purina Company, the largest manufacturers of feed stuffs in the United States, looking around for someone to act as manager of their grain merchandising department, picked on Mr. Chilton as he had proven his ability as a merchant of grain. As manager of the cash grain department of the Checkerboard Elevator Company, a subsidiary of the Ralston Purina Company, he has made a remarkable success and has built up a large business in wheat, corn and oats during a very short period.

He is a progressive man, well liked by his associates and members of the St. Louis Merchants Exchange. He is alert, a hard worker and always on the outlook for a trade. He has also shown executive ability. Mr. Chilton was elected a director of the St. Louis Merchants Exchange and served during the years of 1926 and 1927. He was elected president of the St. Louis Grain Club for 1929 and has acted as chairman of the Weighing and Inspection Department of the Merchants Exchange and chair-

man of the Grain Committee. He is married and has two children, girls. His associates look on him as the coming man in the grain trade.

The following names have been posted for transfer of the memberships in the St. Louis Merchants Exchange: Woodson K. Woods, Jr., a son of Woodson K. Woods, vice-president of the Ralston Purina Company, on transfer from R. M. Guenther; R. G. Graham of the Dannen Hay & Grain Company of St. Joseph, Mo., on transfer from W. H. Batdorf of Belleville, Ill.; Harold Altsmansberger of the Checkerboard Elevator Company on transfer from R. T. Morrison of Kansas City. The last sale of memberships on the St. Louis Merchants Exchange was for \$1,035.

Louis F. Schultz, chairman of the Weighing and Sampling Department of the St. Louis Merchants Exchange and R. R. DeArmond, supervisor of the Department, left Sunday by automobile for Milwaukee, Wis., to attend a meeting of the National Scale Men's Association.

Harry H. Langenburg, president of the Langenburg Bros. Grain Company, arrived in New York April 3 and at St. Louis on April 8, having just completed a tour of North Africa, France and the Continent. Mr. Langenburg is looking remarkably well and had a good time.

Carl L. Langenburg, a brother of Harry H. Langenburg and vice-president of the Langenburg Bros. Grain Company, returned on March 25 from a trip abroad.

Frederick B. Chamberlain, former president of the St. Louis Merchants Exchange, is spending his vacation at Old Point Comfort, Va., and is expected back shortly.

C. W. Smith, a former member of the St. Louis Merchants Exchange, senior member of Smith, Vincent & Co., died on March 11 from an apoplectic stroke at Alhambra, Calif., a subdivision of Los Angeles owned by himself and his relatives. Mr. Smith was 71 years old. Two sons, John and Harry, survive him.

George L. Graham, formerly in the grain business in this market, died on March 28 at Springfield, Mo.

John H. Caldwell has just returned from a trip East and reports conditions favorable.

Work on the cleaning and decorating of the large trading hall of the St. Louis Merchants Exchange is now progressing rapidly, after some delay due to labor troubles. The large group pictures on the ceiling are beginning to show up with remarkable clearness and it is hard to believe that they were painted over 50 years ago. The Merchants Exchange will soon appear in its new spring suit to the enjoyment of the membership.

Herman A. Von Rump, formerly in the grain business under the name of the Von Rump Grain Company, and later with the Dixie Mills as buyer of cash grain, has associated himself with the First National Realty Company, a subsidiary of the First National Bank of Webster Grove, Mo., in St. Louis County. Much success is wished to Mr. Von Rump in his new venture.

BUFFALO

ELMER M. HILL

CORRESPONDENT

ICE fields in lower Lake Erie and in some of the connecting channels along the Great Lakes will delay the opening of the 1929 navigation season until the latter part of April. The United States Weather Bureau, which is accumulating frequent reports covering ice conditions at important points along the chain of inland waterways, believes the first boats from Lake Superior with grain for Buffalo will be able to get through soon after April 22.

Latest reports reaching Buffalo indicate the ice fields extend west in Lake Erie for a distance of almost 40 miles but there are large areas of open water off the north harbor entrance. There is still considerable ice in the vicinity of the Duluth and Superior harbors and Port Arthur ice was reported to be more than 15 inches thick. Moving fields were off Keweenaw Point. Whitefish Bay ice is breaking up and there is open water at Sault Ste. Marie. There is some ice in the easterly end of the straits and St. Clair river is free from ice with practically no visible ice in the Detroit river.

The suspicion that Canadian grain is tampered

with when it is shipped to American Atlantic seaboard points via Buffalo has no foundation, local grain merchants say following receipt of information that such suspicion was voiced during a recent hearing of the Royal Grain Commission. A thorough investigation of the Canadian-American grain situation made some time ago by representatives of the two governments vindicated Buffalo. No grain exporters are located in Buffalo, the grain interests here consisting largely of elevator service organizations which could not possibly be interested in grain mixing. Local grain interests say the situation has been confused by the fact that Canada overgrades grain, as compared with American methods. Hence, an international agreement as a means of solving existing difficulties was suggested at the Winnipeg hearing. J. D. Fraser, chief Canadian government grain inspector, told the Royal Commission that an international agreement might make possible the issuance of a "certificate final" on the Atlantic seaboard for Canadian grain passing through Buffalo terminal elevators in transit.

A number of civic suits have been started in United States District court at Buffalo involving delays in the movement of grain from Lake Superior to Buffalo during the winter of 1927 due to ice conditions at Sault Ste. Marie which held the down-bound carriers at that point all winter. The American Steamship Company, owners and operators of the steamer, *Louis R. Davidson*, has brought suit against the Canadian Co-operative Wheat Producers, Ltd., of Winnipeg, Manitoba, for \$20,925, claiming the defendant shipped on the steamer at Port Arthur, December 9, 1927, a full cargo of grain consisting of 153,634 bushels of No. 4 Manitoba wheat and 181,166 bushels of No. 3 Northern wheat and agreed to pay the carrier six and one-quarter cents, all of which was freight except one-half cent to be paid on arrival and one-half cent to be paid when the cargo was unloaded. The ship left Port Arthur December 9, 1927, and the cargo was consigned to Port McNicoll, Ont. The ship was delayed at Sault Ste. Marie on account of ice and the boat owners say it had no control over this unusual ice condition, so the cargo was held until May 1, 1928, when the voyage was resumed and the cargo was delivered to Port Colborne.

Another similar suit was instituted by the owners of the steamer, *Stephen M. Clement*, against the same defendant for \$17,070 for transportation charges on a cargo of 198,287 bushels of No. 3 Manitoba wheat and 98,592 bushels of Northern Manitoba wheat which the ship had agreed to carry for six and one-quarter cents per bushel. This boat likewise was delayed at Sault Ste. Marie due to ice conditions and the cargo was not delivered to Port Colborne until May 3, 1928. Brown, Ely and Richards appear as attorneys for the plaintiffs.

Ernest S. Crosby, president and general manager of the new St. Lawrence Steamships, Ltd., which will engage in the transportation of grain over the Great Lakes route this summer, has returned from Glasgow, Scotland, where he inspected the construction of two new steel grain boats for his company. The new steamers will be of full Welland Canal size and will operate between Buffalo, Port Colborne and Montreal. They will be 259 feet long with a beam of 43 feet 4 inches and 20 feet deep. The ships are designed to carry 97,000 bushels of wheat each on a draft of 14 feet. The new boats will be named *Algonquins* and the *Sioux*. Mr. Crosby says there are 28 grain boats being built in the yards in Great Britain for 1929 delivery on the Great Lakes, all being for the Lake Erie-Montreal trade. Before organizing his own company, Mr. Crosby was manager of the grain department for Boland and Cornelius, vessel owners and agents of Buffalo.

The New York state barge canal connecting the Niagara River at Tonawanda with the Hudson River will be opened for the eastbound grain movement out of Buffalo early next month, it was stated by a representative of the New York state department of public works. Many boats already have taken on grain cargoes at Buffalo for the first trip to the Atlantic seaboard and it is predicted in grain forwarding circles that this will be a busy season over the state waterway, especially in the shipment of grains from Buffalo terminal elevators.

Grain shipments from the Duluth-Superior harbors at the head of Lake Superior are expected to be somewhat slower this spring as compared with the volume of last year. More than 33,000,000 bushels of grain are in store but Buffalo elevators are quite crowded with storage grain so there is little relief in sight for a big down bound movement with the opening of navigation.

Frank F. Henry, president of the Washburn-Crosby Company, and one of the best known grain, elevator and milling men in the Buffalo area, has been elected a director of the Manufacturers and

Traders-Peoples Trust Company. During the war Mr. Henry served on the Flour Commission of the National Food Administration. He became associated with the Washburn-Crosby Company in 1893 and was elected president of the company last July. He also is a director of the Frontier Mill & Elevator Corporation, General Mills, Inc., and the Keystone Warehouse Company, Inc. Mr. Henry is vice president of the Buffalo Chamber of Commerce.

* * *

Levi S. Chapman of Syracuse, whose estate is in process of liquidation in the bankruptcy courts, is heavily involved in grain elevator affairs in Buffalo and at other points along the Great Lakes. Liabilities are listed at \$1,881,132 with no assets. The largest unsecured creditor is the Cargill Grain Company of Minneapolis with a claim for \$1,000,000. This is represented as a guarantee which Mr. Chapman posted that the Superior Elevator Corporation, of Buffalo, would perform its contract with the Cargill Grain Company until opening of navigation in 1929. The Superior Elevator Company also has an unsecured claim for \$14,559 and is one of the companies for which Mr. Chapman is listed as endorser of notes.

* * *

Production was started some time ago at the new mill of the Wayne Feed Mills of Buffalo, Inc., a subsidiary of the McMillen Company of Fort Wayne, Ind., it was stated by Henry D. Egly, vice-president in charge of production. The mill is located on the lines of the Nickel Plate and Lackawanna railroads. There is a grain storage elevator of 100,000 bushels capacity adjoining the plant which has equipment for the production of 40 cars of feed daily. The Buffalo plant will relieve the Fort Wayne plant of all eastern business in Pennsylvania, Maryland, Virginia, Delaware, New Jersey, New York and in the New England states.

DULUTH

S. J. SCHULTE - - CORRESPONDENT

THE lake navigation season at the Head of the Lakes is expected to be officially opened around April 20 when it is figured the first steamers from lower lakes ports should reach this harbor. Elevator men and shippers are looking forward to an active season in view of stocks of wheat and other grains in storage bins at Duluth and Superior elevators now aggregating approximately 44,000,000 bushels, the heaviest on record. This was made possible through the putting into operation of the 2,500,000 bushels addition to Great Northern Elevators at Superior. Space in the elevators here has been brought up to around 45,000,000 bushels through new elevator construction during the last two years and operators are now flattering themselves upon their ability to take care of all the grain likely to be moved to this market during a considerable period ahead. Spring wheat and Durum wheat make up the great bulk of the holdings of 44,000,000 bushels in the elevators here as on April 9 stocks included 12,900,000 bushels of the former and 14,300,000 bushels of the latter, apart from the 418,000 bushels of Spring wheat that has been afloat in this harbor all winter.

Eastern inquiry for all grains has been so quiet that boat space taken for the opening of navigation so far is not estimated to aggregate more than 1,000,000 bushels. Operators have experienced a light Eastern and export inquiry during the last few weeks but it is assumed that broader interest will be shown as the opening of navigation period approaches.

With knowledge of the record volume of grain to be moved from here and assurances of a heavy movement of iron ore and coal at the opening of the season shipping interests have become firmer in their views. This is reflected in an advance of the wheat freight rate from here to Buffalo of three and one-half cents a bushel with three cents the rate to Georgian Bay ports and ten cents to Montreal.

* * *

Interest of elevator men and receivers on this market is absorbed over the nature of the farm relief legislation to be put through at the coming special session of Congress. The consensus of opinion is that the grain exchanges would be able to function under the suggested bill presented before the committee at Washington by Fred B. Wells of the Peavey Elevator Company of Minneapolis. The measure outlined had received the endorsement of exchanges. Operators in this market are hopeful that more onerous restrictions will not be imposed. Grave doubts are, however, entertained here regarding the efficacy of orderly marketing as a price stabilizer. The experience has

been, so market authorities contend, that foreigners have a habit of holding back their purchases at times when they are aware that liberal stocks are being held in the surplus producing countries that will become available when wanted. It is figured that an enormous government revolving fund would become necessary to carry out the suggested policy. And old tigers in the trade have been endeavoring to work the situation out in all its relations.

In spite of all the uncertainty, traders here are generally expressing their willingness to aid growers of all commodities to obtain the best prices possible for everything they have to sell, even if they are hit at the outset in endeavoring to adjust themselves to the new situation.

* * *

The Consolidated Elevator Company is credited with being the only elevator company with any amount of space to spare at this stage. The policy of its management has been to reserve some storage room to take care of any choice grain that might be offered from time to time. Holdings of Spring wheat and Durum wheat have been fairly well distributed between the houses but the Globe and Peavey, Great Northern Elevators, and Occident are credited with being the heaviest holders of these grains. The Itasca elevator interests specialized in barley to a great extent during the late fall and winter months and have a fair tonnage of that grain to move out at the opening of the season.

* * *

R. G. Schiller, manager of the Occident Elevator Company, is looking forward to a period of activity in shipping out Spring and Durum wheat after the opening of navigation in spite of the apathy apparent at the present. He claimed that his people have considerable grain earmarked to go out early in the season, movable as wanted.

* * *

F. E. Lindahl, manager of the Cargill Elevator Company, has been prominent in Durum wheat and rye marketing during the winter months. He figures that stocks of contract rye on this market have been practically all disposed of and that foreigners are likely to be after the ergotty rye being held here before their interest dies down.

* * *

W. D. Jones, manager of the Hallett & Carey Company's office, is another operator who has been interested in the Durum market situation. He declared that he is free to admit that a large size contract is presented this spring in the disposition of the Durum being held in the houses here. He contends that the acreage seeded to Durum wheat this spring is likely to be fully up to that of last year. His advice is that the Durum acreage will be swelled in the dryers areas of the Northwest and in districts where Spring wheat yields have been falling down to as low as 10 bushels to the acre owing to cropping it too continuously. He noted that, taking experiences of growers, it is possible for those switching over to Durum wheat to raise all the way up to 25 bushels an acre on the same class of land that had been yielding only ten of spring wheat. He contends that millers and export demand for Durum wheat is likely to show steady expansion, and that its growers should fare as well or better than the crowd that has been depending upon Spring wheat.

* * *

C. C. Blair, manager of the Globe Elevator Company's system here, said that his people are not doing any worrying on the score of their Durum wheat as full carrying charges are running on them. He estimated that from 6,000,000 to 8,000,000 bushels of the Durum holdings here have been sold and will be moved out early in the navigation season. Mr. Blair took occasion to stress the point that the Duluth and Superior terminals have the edge over any market in the country in their ability to receive grain from interior points this spring as plenty of storage space will be afforded through the loading out of grain for eastern delivery at the opening of navigation.

* * *

The first cargo of wheat for the season, 250,000 bushels of milling Spring for delivery to the American Elevator Company, Buffalo, was loaded out from the Occident elevator at Duluth on April 9. The Occident's holdings are largely Spring wheat bought during the winter on account of its Buffalo milling connections. The bulk of the grain is expected to be moved early in the season. Another interesting development on this market was the all-rail transport to Chicago of 99,000 bushels of rye from the Itasca elevator on April 9.

* * *

J. M. Cook of Gregory, Cook and Company is convalescing at Battle Creek, Mich., from a serious operation. He is one of the pioneer operators in this market.

* * *

R. M. White of the White Grain Company expressed gratification over the outlook for a heavier trade in coarse grains on this market during the

coming crop year. His house has been, he said, in receipt of steady inquiry for oats and feeds over a wide range of country, which is being developed to a great extent through the remarkable expansion of the dairying industry.

* * *

Winter vacationists from this market are gradually returning from resorts in Florida, California and other southern points. W. H. Salyards intimated that his party had found the Florida heat growing too intense for their liking.

Harry Dunham of the Duluth Shipping Company was given a hearty reception on his return from Arizona where he witnessed the movements of some of the federal and rebel forces in the fighting across the Mexican border.

LOUISVILLE

A. W. WILLIAMS - - CORRESPONDENT

CONDITIONS have been very much as usual with the hay, grain and elevator trade of Louisville over the spring season. Demand has slumped somewhat with fine weather and greatly improved grass. With milk and dairy products slumping in value there isn't as much demand for manufactured feeds, mill feeds, etc. There isn't much demand for grain, and at the same time there isn't a whole lot of hay or corn moving from farms. While roads are getting back in good shape, farmers are too busy in the fields to do any hauling for the time being.

* * *

It is reported that a great deal of tobacco will be planted this spring. Farmers are planning large acreages in corn and tobacco. There is also a good deal of acreage going to clovers, especially Jap clover, which has been strongly backed by the agricultural leaders for the past several years. There has been good seed demand for soya beans, and cow peas, with some millet, red top and Sudan.

* * *

Normal business is reported by the Kentucky Public Elevator Company for the season, daily handlings being fair, but storage stocks are getting lighter as the season advances.

* * *

Henry Fruechtenicht, large local handler of hay, grain, feed, etc., remarked that good weather and grass had resulted in demand out in the state and from the dairies slumping considerably, but the race tracks at Louisville are getting busy, with many horses quartered here, which is resulting in fair demand for hay, straw, oats, etc. Hay movement inbound has been light.

* * *

After occupying quarters at Third and Main street since 1873, the Louisville Board of Trade on April 5 moved to fine new quarters on the fourth floor of the newly completed Louisville National Bank Building at 421 West Market Street in the heart of the financial and legal district.

* * *

F. C. Dickson, general manager of the Kentucky Public Elevator Company, who suffered a stroke of paralysis about the first of the year, appears to have fully recovered and is reported to be as good as ever.

* * *

Ed Scherer, secretary of the Bingham Hewett Grain Company, Louisville, remarked that while business was quiet, there had been some little business handled, and that outlook was fairly good.

* * *

A number of feed dealers in eastern Kentucky suffered losses in last March when cloudbursts caused mountain streams to go on rampages, which resulted in flooding the business districts of Pineville, Middlesboro, Jackson, Barbourville, Harlan, Hazard, and many other towns, as well as several in eastern Tennessee. Hickman in southwestern Kentucky, and lower Nashville, Tenn., also suffered heavily.

* * *

Seedsmen report that there is very little demand this year for seed corn. Last year corn was so bad that there was a good demand for seed stock, but last fall the corn crop was of fine quality. Reports indicate fair wheat prospects, but acreage was not large, so seed wheat was high and scarce, the farmers losing their seed in the winter of 1927-1928, when the wheat crop was frost killed.

* * *

(In recognition of some 15 years of active press work for the business or trade papers, Governor Flem D. Sampson of Kentucky, recently commissioned A. W. Williams, of Louisville, as a colonel on his staff. For some years Mr. Williams has represented the AMERICAN ELEVATOR & GRAIN TRADE and AMERICAN MILLER in Louisville.—Ed. Note)

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Seventh Year

NEW YORK

C. K. TRAFTON — CORRESPONDENT

ALTHOUGH there has been no sensational increase in the volume of business in the securities market on the New York Produce Exchange, this has failed to create any general feeling of disappointment among the members, the majority of whom feel satisfied because business has been going along in average volume and in a fairly consistent fashion. Whereas, in many other markets, and notably on the New York Stock Exchange, there was a marked shrinkage in the volume of business with the development of the recent reactionary price movement.

Hence it is argued that the Produce Exchange market is progressing on its own merits and that larger dealings will be recorded as soon as business generally becomes more active. In the meantime, it is noted that the list of securities traded in is being steadily made more attractive to the trading public, additional issues being admitted to the list which now numbers about 350. In addition, more representatives of houses dealing in securities are being admitted to membership and applications from others wishing to join are awaiting action by the board of managers.

Edward Hymers, a member of the well-known firm of Jackson Brothers Boesel & Company, on the Chicago Board of Trade, was one of the late March visitors on the New York Produce Exchange.

E. T. Maynard, secretary of the Securities Committee on the Chicago Board of Trade, was one of the visitors on the Produce Exchange floor during the last week in March.

James Seligman, stock broker, was among the applicants elected to membership in the Produce Exchange at the early April meeting of the board of managers.

Alfred Fisher, formerly associated with the well-known commission and brokerage firm of Pritchard & Co., on the Produce Exchange, has severed that connection and become affiliated with Wade Bros. & Co.

Barnett Faroll of Faroll Bros., prominent commission merchants on the Chicago Board of Trade, paid a brief visit to his friends on the Produce Exchange toward the end of March.

Randolph Catlin of the Gold Dust Corporation has made application for admission to membership in the Produce Exchange.

James E. Cairns, for many years a prominent member of the Chicago Board of Trade, paid a brief visit to his many old friends here last month.

Merrill H. Watson of Jardine, Matheson & Co., importers and exporters, is an applicant for membership in the Produce Exchange.

Thomas Y. Wickham of the Beach, Wickham Grain Company, on the Chicago Board of Trade, was a visitor late in March among members of the grain trade on the Produce Exchange.

Max Straus of William E. Lauer & Co., stock brokers, was elected to membership in the N. Y. Produce Exchange early this month.

Fred L. Hebert, a well known and popular member of the grain trade on the Produce Exchange for about 45 years, having been among those who marched up from the old building to the present one in 1884, has announced that he has gone into the grain brokerage business on his own account. This followed the severance of his relations with the New York office of the Cargill Grain Company with which he had been connected for about six years.

Gardiner B. Van Ness, well known member of the grain trade on the Chicago Board of Trade, spent a few hours with friends here early in April.

Monte Harris of Earle & Stoddart, Inc., grain exporters, is an applicant for membership in the Produce Exchange.

Paul Robson & Co., well known grain merchant firm on the Produce Exchange, have announced that John W. Busby is no longer in their employ.

There has been practically no trading in tickets of membership in the Produce Exchange during the past month. At any rate, if anything was done the terms were kept strictly private. As a consequence

it is impossible to give a positive quotation. But in the absence of confirmed reports regarding sales, it is assumed that tickets are probably worth somewhere between \$16,000 and \$17,000.

Thomas P. Hasler, Arthur G. Jenssen, and W. DeF. Wright, Jr. were elected to membership on the Produce Exchange at the April meeting of the board of managers.

Arthur W. Graef, of Arthur E. Frank and Company, stock brokers, is an applicant for membership in the Produce Exchange.

Alvin D. Holman, one of the veterans in the grain and feed trade on the Produce Exchange, passed away on March 25 at the age of 72 years.

Members of the grain trade not only on the Produce Exchange, but in various other markets, especially Baltimore, were deeply shocked to learn of the untimely death of T. Carroll Fahey. Mr. Fahey, who was only 39 years of age, died of pneumonia on March 24, a brief illness lasting only about one week.

The bulletin boards of the Produce Exchange announced the death on March 20 of John H. Lynch of the Terminal Warehouse Company of Brooklyn in his sixty-ninth year.

MINNEAPOLIS

ALBERT W. MORSE — CORRESPONDENT

Construction of a new head house for the Sheffield Elevator Company replacing the temporary arrangement which was thrown out of commission by the fire a few weeks ago and replacing more permanently the working house which burned 15 or more years ago, was started on April 1 at Elevator "K." There are to be four new cleaners, with three take-away legs for each set of two cleaners, making six



AS THE NEW HEADHOUSE SITE OF ELEVATOR "K" LOOKED ON APRIL 3

take-away legs instead of the two which were employed before the fire a few weeks ago. Designs will permit the eventual addition of two more cleaners. Thirty-six-inch conveyor belts will supersede the 28-inch belts which burned in the fire last month, and the general arrangement will be improved so that grain may be handled more expeditiously. The new structure will be of steel and concrete, to be completed about the first of June. Burt H. Fuller is the superintendent.

Another snow hit Minneapolis and adjacent territory, especially that to the south of town, on April 10, perhaps causing some delay in preparation for this year's crops.

King Midas Mill Company is getting a 550,000-bushel addition to its storage at Hastings. Actual work on the site was started on the first of April. The new storage space will consist of a total of 33 bins, 14 of them being circular tanks, with 19 interspace bins. The 14 tanks are to be 24 feet in diameter and 91 feet high. It is to be entirely of reinforced concrete, ready for use on June 15, or shortly thereafter.

Equity Elevator & Trading Company, Hillsboro, N. D., are to have a 55,000-bushel elevator, of all-concrete construction, containing a total of 20 bins, to be completed about July 15. The engineers and contractors, intended to start the construction about April 15. Equipment is to include two stands of steel elevator legs; a modern disc cleaner; steel boots, automatic roller bearing take-ups, and Uni-

versal head drives; a 15-ton Fairbanks Dump Scale; about five Fairbanks Morse Motors; the latest type of improved double distributor; and a 10-bushel automatic scale. All bearings are to be of the anti-friction roller type.

Hunting Elevator Company, Lake City, Minn., were installing a feed mill the last week in March, placing it in one of the corner bins of their present elevator. It is a hammer mill, with a cyclone blowing system, run by a Fairbanks Morse two-horse-power totally enclosed, fan-cooled motor.

A. L. Stanchfield, grain, feed and flour man, Minneapolis, is making arrangements to drive through Glacier and Yellowstone parks, accompanied by Mrs. Stanchfield and their son and daughter, starting in June. He is counting on prompt delivery by Henry Ford of a "town" sedan.

KANSAS CITY

MERRYL SCHWIND — CORRESPONDENT

IN THE FACE of the biggest surplus of wheat in the history of the Kansas City territory, producers have been denied the possibility of foreign outlet for 15 to 20 million bushels in the early crop year. This was due to the failure or inability of the United States Shipping Board to supply vessels at the Gulf ports, according to the contention of the Kansas City Board of Trade, set forth in a letter to T. V. O'Connor, chairman of the shipping board at Washington.

It is pointed out that the continued scarcity of ocean shipping facilities not only presents a problem for exporters of this important grain producing territory but also deprives farmers of this principal outlet for much surplus grain. The fact that the competition of the United States Shipping Board has largely driven the small foreign operated lines and tramp steamers out of American ports has made the grain industry primarily dependent on the United States government service.

The letter says in part: "All during the past season on wheat and in the last several months on corn, barley and kafir, Kansas City and Gulf exporters besieged officials of your organization with requests for ships to carry grain already sold, and for additional ocean space by which they might offer more grain in reply to constant requests and bids coming from European buyers. Exporters were driven out of the market as there was general reluctance to contract grain as shipping agents sated repeatedly that no ships were available.

"With large stocks of grain in Kansas City elevators and at the seaboard and considerable grain ready to move from the farm, it was impossible to consummate sales. There is no way of estimating the loss to the growers and the grain industry as a whole in this territory. Certainly no better farm relief could be advanced than to open new outlets and move exportable surplus of products out of this country. If the shipping board continues to disregard this important fact in its failure to supply the necessary ships during the season of European demand, it will have the effect not only of depressing the American price for grain but will also place the future of our grain export possibilities in jeopardy."

It is pointed out that Kansas City exporters are vitally concerned in the solution of the shipping board problem, for the Hard Winter wheat area is the season's earliest territory to offer bread grain to Europe. Export movement from the Kansas City territory starts before the Canadian crop is harvested. Thus when movement from this section is retarded through lack of shipping facilities this wheat must then be sold in competition with the cheaper grades from Canada where 75 per cent of the wheat produced must find an outlet in other countries.

The letter was concluded with a request for a statement from the shipping board as to what future action might be expected, and assured the board of the hearty cooperation of the Kansas exchange in bringing about a more favorable shipping situation in the Gulf ports.

In answer the shipping board said that the Kansas City board has misinformation about conditions at the Gulf in regard to available space. The Board of Trade is now preparing a second letter substantiating their first communication. It incorporates about 100 telegrams from the seaboard, each one of which referred to the lack of ships.

The new stock pit to be established by the Kansas City Board of Trade will open on June 3, according to a recent announcement of James N. Russell, chairman of the Securities Trading Committee. By-laws and regulations and rules for listing securities are near completion by the special committee on listing securities. W. R. Scott, secretary of the Kansas City Board of Trade will be

manager of the new securities trading department. In addition to Mr. Russell the other members of the committee are George S. Carkener, vice-chairman, George H. Davis, E. O. Bragg, and Paul Uhlmann. The Kansas City securities trading department is the first to be started by a strictly grain exchange. The board will provide a combination call and constant market.

E. O. Bragg has just returned to Kansas City after several weeks spent in Florida. Mr. Bragg is a member of the firm of Diffenbaugh & Bragg.

Governor Clyde M. Reed, of Kansas, has issued invitations to the traffic managers of all the principal grain carrying railroads in the Southwest, and representatives of the Kansas City Board of Trade and other interior markets, to a meeting in Topeka on April 15. The meeting is called for the purpose of starting a move to reduce the export rates on grain. The attitude of the Interstate Commerce Commission and of other grain producing sections of the country is a question of interest to those familiar with rate matters. It is taken for granted that any general agreement to reduce export rates on grain from the Southwest would naturally meet with a demand for the same reduction from other sections.

When Ben (B. C.) Moore of the Moore, Seaver Grain Company, and a former president of the Kansas City Board of Trade, retired from business recently, his friends from the exchange did not forget him. Mr. Moore has gone out to his country place to make his home and far from letting him



B. C. MOORE

forget his former associates, they descended upon him, 30 strong, last week with a shower including a horse and other farm animals. The horse however was the big feature of the event, and many of those present are still wondering where such a forlorn specimen of war steak was discovered. Every rib stood out separately and to make the effect even more startling each rib was painted with black. C. P. Cauthorn, who is a real authority on blooded horses, prepared the pedigree, which was traced out to the finest detail, but did not establish much as to the right of "Show Girl," as the horse was named, to a place among equine royalty. The reading of the pedigree did however prove Mr. Cauthorn a humorist of parts. Mr. and Mrs. Moore have not stated whether "Show Girl" will become a permanent part of their rural menage.

Secretary Arthur M. Hyde met with representatives of the Kansas City Board of Trade and of the Livestock Exchange in an informal conference when he was in Kansas City the latter part of March. The meeting was held in the Kansas City Club.

F. D. Farrell, president of the Kansas State Agricultural College has called a research conference for studying Hard wheat problems, to be held on May 10 in Kansas City. The conference will bring together representatives of forty organizations in Missouri, Kansas, Nebraska, Oklahoma and Texas, for general sessions, and state sessions where special state problems connected with wheat growing will be discussed.

A special committee has been appointed by the directors of the Kansas City Board of Trade composed of H. C. Gamage, F. C. Vincent and H. J. Smith to whom all market or crop information must

be submitted for censor before being sent out either by public or private wires, by letter, through the newspapers or otherwise. The new ruling is to assist the members in abiding by the rule which provides that no member shall disseminate any false, misleading or knowingly inaccurate report concerning crop or market information or conditions that affect or tend to affect the price of grain or commodities in interstate commerce or otherwise.



It was recently announced by the Burlington railroad that 600,000 bushels of storage will be added to their Gibson elevator which is operated by the Nebraska-Iowa Grain Company. Further improvements will include remodeling of the workhouse to increase handling capacity and the addition of a drier with a capacity of 1,000 bushels per hour.

This new storage will give the Nebraska-Iowa Grain Company a total of 1,000,000 bushels' storage capacity at Omaha in addition to which they operate a line of eight country elevators.

At the last meeting of the Omaha Grain Club, E. C. Twamley of J. F. Twamley Son & Co., was elected president and J. S. Hedelund of the United Grain Company was elected secretary for the coming year to succeed J. A. Linderholm and B. O. Holmquist, retiring officers.

Another feature of the meeting was the presentation of "E-Ro-Ma-Ha", a motion picture of Omaha's various industries.

A. R. Kinney of the Nebraska Consolidated Mills Company returned Monday, April 8, from California where he has been vacationing for the past month.

H. A. Butler of the Butler-Welsh Grain Company returned the following day after a six weeks' stay on the west coast.

Among those who will go from Omaha to Cedar Rapids to attend the convention of the Western Grain Dealers Association on April 17 and 18 are the following: Ray Sage and H. W. Shepard of the Trans-Mississippi Grain Company, O. H. Gibbs of the Lucke-Gibbs Grain Company, C. W. Adams of the Black Hawk Grain Company, R. E. Miller and A. H. Bewsher of the Updike Grain Corporation, B. O. Holmquist of the Holmquist Elevator Company, F. H. Hall of the Crowell Elevator Company and H. C. Christiansen of the Omaha Elevator Company.

Due to the very serious illness of his wife, John Redick, of the John W. Redick Company, has been kept at home for the past 10 days.

After having been confined to his home for several weeks due to a severe attack of the "flu" followed by an ear infection, J. T. Buchanan, of the Omaha Elevator Company, returned to his duties on the Trading Floor about a week ago.

On account of financial difficulties, the Nebraska-Colorado Grain Company has been suspended from membership in the Omaha Grain Exchange.

E. S. Miller of the Miller Cereal Mills is at present in a California sanitarium, convalescing from a severe attack of arthritis, but expects to be home in a few weeks.

F. C. Bell, of the Bell-Trimble Grain Company, leaves next week for Excelsior Springs to spend a couple of weeks.

Nebraska's Winter wheat crop came through the winter in splendid shape, and although it suffered a little from high winds late in March and the first week in April, general rains the past few days have more than compensated for the slight damage that may have occurred.

Oats seeding is well under way although it has been somewhat delayed by rains. Acreage will be about normal except in central Nebraska where a greater acreage than usual will be used for barley.

GRAIN NEWS FROM BOSTON

By L. C. BREED

Eastern States Farmers Exchange, Springfield, Mass., recently held its annual meeting. John D. Zink, general manager, in his annual report, said that the business of the Exchange for last year totalled \$10,000,000, compared with \$200,000 11 years ago. The Exchange handles grain, feed, seeds and

fertilizers. Farmers of 11 states are members and the membership now is about 25,000.

New England Grain Company, Boston, has been incorporated. The capital stock is 58,000 shares without par value. Charles M. Cox is president and Herbert L. Hammond, treasurer.

B. J. Rothwell of Bay State Milling Company, has been named as chairman of the Nominating Committee for the Boston Chamber of Commerce to submit names of candidates for the Board of Directors to be voted upon at the annual meeting in May to fill vacancies through the expiration of the time of service by some of the directors.

The Boston Chamber of Commerce recently arranged an Art Week during which some of the members placed on exhibition some of their paintings. Among the number was Charles M. Cox of the Charles M. Cox Company, who contributed six fine oil paintings. For several years Mr. Cox has devoted much of his spare time to the execution of paintings, having made the study of art a favorite hobby.

Louis W. De Pass, secretary of the Boston Grain & Flour Exchange, who has been ill for some weeks, is expected to be able to resume his duties at the Exchange in a few days.

During the month of March trade with the New England grain dealers has been fairly active though many of them did not place large orders, consequently stocks are light. The demand for wheat feeds has not been up to that of the average in volume for the season of the year, owing to farmers not having very generally shifted from feeding corn to feeding wheat feeds as usually is the case in the spring. Prices for shipment are ruling weak, but the offerings are not urgently made. Considerable Canadian wheat feed is stored at Newport, Vt., which is being held and is somewhat above the market prices for western shipment. There is a fair demand for chicken wheat and prices are firm.

Boston seed dealers report having a steady increase of business, the demand coming from country stores who are now supplying the farmer as the season promises to open earlier than was the case a year ago. As soon as roads in the country get into good condition it is expected that the movement will become general.

During the past month the demand locally for hay has been moderate and the receipts have been ample. Prices are steady. The receipts of hay at Boston for the month of March were 170 cars; straw, 5 cars.

Stocks of grain in the regular elevators at Boston, as of March 30, were as follows: Wheat, 1,631,624 bushels; oats, 24,361 bushels; rye, 4,525 bushels; barley, 8,640 bushels.

The receipts of grain at Boston during the month of March, as tabulated by the Boston Grain & Flour Exchange, were as follows: Wheat, 302,100 bushels; oats, 71,100 bushels; barley, 119,100 bushels; malt, 5,150 bushels; mill feed, 147 tons; corn meal, 625 barrels; oat meal, 12,703 cases and 671 sacks.

The exports of grain from Boston during the month of March were as follows: Liverpool, 32,000 bushels wheat; Bremen, 8,000 bushels wheat; Hamburg, 16,000 bushels wheat; Hamburg, 51,000 bushels barley; Bremen, 131,080 bushels barley.

The visitors to the Exchange during the month of March, outside of New England, were as follows: W. C. Boeke, Cascade, Mont.; C. B. Kelly, Butte, Mont.; W. H. Built, Seattle, Wash.; E. G. Brush, Moria, N. Y.; Michael Cohn, Chicago, Ill.; H. H. Richardson, Buffalo, N. Y.; C. E. Taylor, Duluth, Minn.; Harley Flood, Duluth, Minn.; Bob Crawford, Chicago, Ill.; C. F. Spaulding, Chicago, Ill.; John S. Moffat, Montreal, Canada.

SWEDEN HAS RECORD CROP

The 1928 wheat production in 46 countries from which estimates have been received at Washington, D. C. is 3,683,666,000 bushels, an increase of 5.5 per cent over the 3,493,249,000 bushels produced in those countries in 1927. The 1928 crop in Sweden was a record one, being estimated at 19,470,000 bushels, an increase of 20.5 per cent over the 1927 crop. The estimate of the Spanish crop has been reduced further and is now placed at 122,640,000 bushels against 144,825,000 bushels in 1927.

The exports of wheat including flour from the United States from July 1 to February 23 were 116,677,000 bushels against 172,808,000 bushels during the same period last year. The exports during the week ended February 23 and were 1,404,000 bushels against 1,895,000 bushels the previous week.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Seventh Year

RECEIPTS AND SHIPMENTS FOR MARCH

BALTIMORE—Reported by Jas. B. Hessong, Secretary of the Chamber of Commerce:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	2,011,928	763,243	1,343,569
Corn, bus..	107,562	310,536	103,808
Oats, bus..	26,850	58,272	29,950
Barley, bus..	691,729	183,644	716,539
Rye, bus..	2,758	4,443	756,280
Mill Feed, tons.....	1,001	750	34,896
Malt, bus..	27,013	16,702	.....
Straw, tons.....	49	22	.....
Hay, tons.....	69,426	76,332	5,955
Flour, bbls..	.....	.....	5,893

CHICAGO—Reported by F. H. Clutton, Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	1,363,000	2,279,000	1,459,000
Corn, bus..	5,708,000	13,893,000	2,567,000
Oats, bus..	1,396,000	4,854,000	2,092,000
Barley, bus..	641,000	723,000	490,000
Rye, bus..	189,000	233,000	21,000
Timothy Seed, lbs..	802,000	1,826,000	1,478,000
Clover Seed, lbs..	1,616,000	1,313,000	654,000
Other Grass Seed, lbs..	1,202,000	1,955,000	1,638,000
Flax Seed, bus..	230,000	220,000	.....
Hay, tons.....	6,289	7,211	802
Flour, bbls..	956,000	1,060,000	518,000

CINCINNATI—Reported by J. A. Hallam, Chief Inspector of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
*Wheat, bus..	186,200	137,200	183,400
Corn, bus..	456,400	576,000	434,000
Oats, bus..	180,000	416,000	270,000
Barley, bus..	8,000	11,200	4,800
Rye, bus..	11,200	1,400	.....
Ear Corn, bus..	.....	5,000	.....
Gr. Sorghums, bus..	1,400	.....	.....
Feed, tons.....	330	390	.....
Hay, tons.....	8,330	9,878	.....

*Estimated on carlot basis of: Oats 2,000 bus., Barley 1,600 bus., Ear Corn 1,000 bus., Hay 11 tons, Feed 30 tons, all others 1,400 bus.

†No Record of Shipments where none given for either year.

DENVER—Reported by H. G. Mundhenk, Secretary of the Grain Exchange:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, cars..	219	298	16
Corn, cars..	985	552	197
Oats, cars..	33	46	8
Barley, cars..	70	17	11
Rye, cars..	1	.....	.....
Beans, cars..	88	50	30
Hay, cars..	102	85	.....
Mixed Grains, cars.....	.....	3	.....
Kaffir Corn & Milo, cars.....	5	3	.....

DETROIT—Reported by D. Fasnough, Assistant Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	130,000	150,000	4,000
Corn, bus..	65,000	45,000	6,000
Oats, bus..	90,000	80,000	22,000
Barley, bus..	40,000	30,000	.....
Rye, bus..	30,000	35,000	6,000

DULUTH—Reported by Charles F. MacDonald, Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	4,492,283	3,933,237	1,561,080
Corn, bus..	17,388	89,636	7,092
Oats, bus..	249,331	77,162	28,500
Barley, bus..	409,111	527,068	220,000
Rye, bus..	285,673	1,114,753	128,282
*Wheat, bus..	11,526	12,991	.....
*Barley, bus..	13,714	1,834	.....
Flax Seed, bus..	37,332	108,655	11,525
*Flax Seed, bus..	.....	.....	18,384
Flour, bbls..	88,705	99,515	89,610

*Bonded.

PORT WILLIAM, ONT.—Reported by E. A. Ursell, Statistician of the Board of Grain Commissioners for Canada:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	5,223,290	3,251,329	496,296
Corn, bus..	.....	.....	887,638
Oats, bus..	1,853,496	678,930	748,835
Barley, bus..	944,631	314,836	25,899
Rye, bus..	283,705	111,217	6,300
*Mixed Grain, bus..	70,576	16,717	2,999
Flax Seed, bus..	17,856	36,685	.....

*50 pounds per bushel.

GALVESTON—Reported by H. A. Wickstrom, Chief Inspector of the Cotton Exchange and Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	177,333	80,000
Corn, bus..	1,264,348	523,895
Barley, bus..	25,000	35,559
Rye, bus..	17,142
Kaffir Corn, bus..	204,196	90,842

KANSAS CITY—Reported by W. R. Scott, Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	5,006,430	3,607,890	3,427,710
Corn, bus..	4,692,000	5,472,000	3,075,000
Oats, bus..	426,000	368,000	244,000
Barley, bus..	75,200	49,600	36,800
Rye, bus..	10,500	12,000	6,000
Bran and Shorts, tons.....	6,000	6,520	16,940
Cane Seed, bus..	27,600	125,350	36,800
Flax Seed, bus..	.....	.....	32,400
Kaffir-Milo, bus..	705,100	591,800	451,000
Hay, tons.....	29,568	28,272	13,608
Flour, bbls..	61,100	65,000	705,250

INDIANAPOLIS—Reported by Wm. H. Howard, Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	119,000	319,000	119,000
Corn, bus..	1,674,000	2,835,000	1,560,500
Oats, bus..	724,000	998,000	836,000

LOS ANGELES—Reported by the Secretary of the Grain Exchange:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, cars..	244	281	.....
Corn, cars..	235	311	.....
Oats, cars..	13	18	.....
Barley, cars..	122	111	.....
Rye, cars..	78	1	.....
Milo, cars..	.....	106	.....
Kaffir Corn, cars.....	90	95	.....
Alfalfa, cars..	14	.....	.....
Seed, cars..	89	25	.....
Beans, cars..	26	22	.....
Rice, cars..	37	53	.....
Linseed, cars..	7	17	.....
Hay, cars..	550	275	.....
Flour, cars..	377	179	.....

MILWAUKEE—Reported by H. A. Plumb, Secretary of the Chamber of Commerce:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	78,640	138,240	42,500
Corn, bus..	930,120	2,087,160	569,000
Oats, bus..	352,220	367,500	89,500
Barley, bus..	733,330	1,055,040	388,080
Rye, bus..	66,010	91,800	55,480
Timothy Seed, lbs..	1,080	219,520	316,110
Clover Seed, lbs..	74,790	356,601	2,127,425
Feed, tons.....	1,280	4,740	8,820
Flax Seed, bus..	8,580	135,850	4,290
Malt, bus..	41,800	55,100	286,900
Hay, tons.....	387	493	300,200
Flour, bbls..	150,850	183,750	9,100
Sheep, nos.....	1,665	6,629	264
Hogs, nos.....	93,631	93,696	2,091
Cattle, nos.....	11,569	14,448	1,251
Calves, nos.....	51,285	60,366	53

MINNEAPOLIS—Reported by G. W. Maschke, Statistician of the Chamber of Commerce:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	6,911,200	9,277,860	3,065,550
Corn, bus..	721,430	1,296,970	552,010
Oats, bus..	931,470	2,340,630	1,055,060
Barley, bus..	1,444,650	2,258,600	892,400
Rye, bus..	468,600	419,950	202,130
Flax Seed, bus..	327,940	470,990	349,780
Hay, tons.....	2,596	2,489	616
Flour, bbls..	19,057	18,065	886,325

MONTREAL—Reported by J. Stanley Cook, Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	216,530	503,269	167,997
Corn, bus..	21,440	34,316	7,263
Oats, bus..	361,393	409,659	60,928
Barley, bus..	110,749	28,061	10,463
Rye, bus..	.....	.....	5,568
Flax Seed, bus..	65,100	88,081	.....
Hay, bales.....	40,356	30,304	.....
Flour, bbls..	106,289	99,094	96,402

NEW ORLEANS—Reported by S. P. Fears, Chief Grain Inspector and Weighmaster of the Board of Trade, Ltd.:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, cars..	45	117,913	338,279
Corn, cars..	230	1,238,941	894,767
Oats, cars..	33	93,389	68,309
Barley, cars..	13	413,359	.....
Rye, cars..	.....	.....	27,499
Grain Sorg, lbs..	5	.....	.....
Bushel Receipts:	.....	.....	.....
Wheat, bus..	41,908	.....	.....
Corn, bus..	301,854	.....	.....

NEW YORK CITY—Reported by H. Heinzer, Statistician of the Produce Exchange:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	2,399,600	3,417,200	2,636,000
Corn, bus..	93,000	264,000	85,000
Oats, bus..	568,000	962,000	219,000
Barley, bus..	94,400	83,500	922,000
Rye, bus..	45,000	208,500	1,035,000
Clover Seed, bags.....	.....	168	2,105
Flax Seed, bus..	.....	113,000	.....
Hay, tons.....	2,721	3,767	4,311
Flour, bbls..	1,742,000	1,180,000	445,000

OMAHA—Reported by F. P. Manchester, Secretary of the Grain Exchange:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	1,972,800	1,478,400	1,743,000
Corn, bus..	1,429,400	3,390,800	1,422,400
Oats, bus..	802,000	1,186,000	684,000
Barley, bus..	52,800	36,800	56,600
Rye, bus..	65,800	74,200	63,000

PEORIA—Reported by John R. Lofgren, Secretary of the Board of Trade:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	168,600	114,000	156,000
Corn, bus..	1,426,450	2,581,500	683,850
Oats, bus..	414,000	1,138,600	410,400
Barley, bus..	260,000	249,200	72,800
Rye, bus..	7,400	1,200	4,800
Mill Feed, tons.....	36,190	52,760	49,283
Hay, tons.....	670	2,390	130
Flour, bbls..	270,000	344,500	261,300

PHILADELPHIA—Reported by A. B. Clemmer, Secretary of the Commercial Exchange:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	992,881	648,186	724,507
Corn, bus..	45,684	242,510	25,200
Oats, bus..	64,246	85,354	26,508
Barley, bus..	40,117	1,665	136,666
Rye, bus..	.....	64,835	121,132
Flour, bbls..	156,241	151,250	10,257

PORTLAND, ORE.—Reported by F. W. Clark, Manager of the Merchants Exchange:

Receipts		Shipments	
1929	1928	1929	1928
Wheat, bus..	1,548,600	2,240,250	1,658,358
Corn, bus..	174,655	165,000	393
Oats, bus..	117,800	110,000	6,520
Barley, bus..	35,200	27,200	11,520
Rye, bus..	2,500	8,000	11,600

ST. LOUIS—Reported by C. B. Rader, Secretary of the Merchants' Exchange:

	Receipts		Shipments	
	1929	1928	1929	1928
Wheat, bus. . .	2,902,200	2,658,600	2,201,600	1,700,000
Corn, bus. . .	3,351,600	4,692,800	2,123,800	3,094,600
Oats, bus. . .	2,215,400	1,850,000	1,986,200	2,068,000
Barley, bus. . .	131,200	104,000	28,800	29,800
Rye, bus.		13,000		2,600
Kafir Corn, bus.		160,000		
Hay, tons	158,400		44,400	50,400
Clay, tons	5,280	4,800	2,724	1,957
Flour, hbbls.	570,410	549,820	440,490	473,220

indicate that additional moisture was still needed in many sections of the Prairie Provinces.

Reports received to date from the principal European Winter wheat areas show no unusual amount of winter killing and the wheat and rye crops are reported to be making generally favorable progress in most areas.

WHEAT SHIPMENTS FROM SOUTHERN HEMISPHERE SMALLER

Offerings of wheat from the Southern Hemisphere have become smaller but about 50,000,000 bushels more wheat remain to be marketed in Argentina at this time than were shipped out during the remainder of the season last year, according to trade estimates. Harvesting in India is progressing and demand from that country for Australian wheat has diminished. Scarcity of bread grains is reported in Russia and there is a possibility of that country having to enter the world's market for wheat or flour before their new crop is available.

European demand for American wheat has improved slightly since Argentine offerings have decreased.

Recent sales to Europe have included some United States Durum and Hard Winter wheat but still were mostly of Canadian grain. Wheat stocks in Canada are around 35,000,000 bushels greater than the large supply on hand in that country a year ago. Market stocks in the United States are still large and at the first of April totaled nearly 125,000,000 bushels compared with about 70,000,000 bushels in store at the corresponding time last year.

Foreign wheat markets have also declined and wheat from the principal exporting countries is being offered at Liverpool at around 5 to 7 cents per bushel lower than a month ago. Sixty-three pound Argentine Rosa Fe afloat was quoted in Liverpool April 5 at 1.25%, Australian wheat and No. 3 Manitoba at 1.37%. American amber Durum was quoted, c.i.f. Genoa, on that date at \$1.32½ per bushel.

CASH WHEAT MARKETS FIRMER THAN FUTURES

Cash wheat markets are holding relatively firmer than futures and some increase in premiums has practically offset the decline in the futures trading basis. Receipts of Winter wheat at the principal markets have decreased materially during the past month as a result of lower prices and the press of spring farm work. Demand has been of only moderate volume but premiums have advanced two to three cents per bushel. On April 10 No. 2 Hard Winter wheat with 13 per cent protein was quoted at Kansas City at eight to 10 cents over the May price of \$1.12½.

Soft Red Winter wheat markets have been relatively weaker than those for Hard Winter and prices have declined eight to nine cents per bushel during the past month. For the first week in April prices of No. 2 Soft Red Winter wheat at St. Louis averages \$1.30 per bushel, or 51 cents lower than at the corresponding time last year, while No. 2 Hard Winter at Kansas City averaged only 33 cents lower than a year ago. The substitution of the cheaper low protein Hard Winter for Soft Winter wheat by many of the southern and southeastern mills is largely responsible for the lower prices of Soft Winter wheat this season as compared with other classes of wheat.

Spring wheat cash markets have followed generally the fluctuation in future prices. Receipts of Spring wheat during the past month were only of moderate volume but demand continued dull. Thirteen per cent protein No. 1 dark Northern was quoted April 10 at Minneapolis at seven to 13 cents over the May price of \$1.17½. The average of all sales of No. 1 dark Northern Spring at Minneapolis during the first week in April was \$1.27 per bushel compared with \$1.32 a month ago and \$1.51 for the corresponding week last year. The Winnipeg market has declined about eight cents during the past month and No. 1 Manitoba Northern was selling April 10 in that market at about \$1.23 to \$1.24 per bushel.

Durum wheat has declined with other Spring wheat and May Durum at Duluth closed April 5 at \$1.02½. No. 1 amber Durum 14 per cent protein was quoted at Duluth on that date at seven to 20 cents

over the May price. The scarcity of good milling quality Durum wheat has held prices of amber Durum fairly steady and the weighted average price of all sales during the past few weeks has been only 12 to 15 cents per bushel below the average for the corresponding period last season.

Western markets have shared in the weakness of the general market situation and have continued rather inactive. Some Montana wheat has recently moved to the Pacific Coast markets, principally for milling purposes, according to trade reports. Farmers in the Pacific Northwest are mostly holding for higher prices and exporters are reported unable to compete in the world markets, although some cargoes were reported sold at Portland during the past month. White wheats were selling at Portland at the close of the week ending April 5 at \$1.17 to \$1.18 and Red wheat at \$1.15 to \$1.16 per bushel. No. 1 Hard Wheat was quoted at San Francisco at \$1.26 and No. 1 Soft Western White at \$1.23 per bushel. No. 2 Hard Winter wheat in bulk was quoted at Los Angeles at \$1.23 compared with \$1.27½ for No. 2 California Sonora and \$1.32 for No. 2 California Baart wheat. No. 2 Hard Winter and No. 2 Northern Spring were quoted at Denver at 86 to 90 cents and No. 2 Soft White at 96 cents to \$1 per bushel.

United States farmers have expressed an intention of decreasing Durum wheat acreage nearly 20 per cent this spring. If these intentions are carried out and if average yields are obtained, it would result in a production of about 66,000,000 bushels, or about 29 per cent below last year's harvest. Most of the decrease in the Durum acreage, however, is made up by an increase of about 8 per cent in the intended acreage of other Spring wheat, so that taken altogether the intended decrease in Spring wheat acreage is only about 0.4 of one per cent below the acreage harvested in 1928.

The rye market has shared in the weakness of wheat but a good demand from mills, together with light offerings has given a fairly steady tone to the cash market. The condition of the growing rye crop is much better than last season but slightly below average on April 1 for the past 10 years. The condition on April 1 was 84.9 per cent of normal. In the Ohio Valley the condition is in marked contrast to a year ago, when the lowest condition on record was reported. The condition of 77 per cent reported in North Dakota, the principal rye producing State, may not be especially significant this season, since the crop had just emerged from the snow cover.

Marketings of rye have been very small recently, according to trade reports, but demand has also been limited and market stocks have shown further increase during the past month. Nearly 7,000,000 bushels of rye were reported in store at the principal markets at the first of April compared with about 5,000,000 bushels a year ago and about 14,000,000 bushels two years ago. Prices have declined about 10 cents per bushel during the past month. No. 2 rye was quoted at Minneapolis April 10 at 93½ cents to \$1.01 per bushel compared with \$1.04½ to \$1.11½ a month ago and \$1.15½ to \$1.16½ a year ago.

CORN PRICES LOWEST SINCE JANUARY

The corn market tended steadily downward during March and the early part of April and prices reached the lowest point since early in January. Reduced numbers of livestock on feed, together with the fairly large supply of corn available for the remainder of the season, are the principal weakening factors. Increased shipments from Argentina, which have materially reduced export demand for United States corn by European buyers have also been a contributing factor. Shipments of Argentine corn increased sharply during the last week in March and the first week in April, which would indicate that the crop in that country is two to three weeks earlier than last season. Trade estimates place the Argentine corn surplus from the 1929 crop at 207,000,000 bushels. This compares with 237,000,000 bushels shipped out to date from last season's supply.

At the middle of April corn planting in the United States had become quite general in Oklahoma and had begun as far north as southern Kansas, Missouri, Kentucky and North Carolina.

Farmers are expecting to increase their corn acreage slightly this year, according to their intentions as reported to the Department of Agriculture. The principal decrease reported is in the eastern and central parts of the Corn Belt. Increases are intended in the western part of the Corn Belt and in the North Atlantic and Western States, with only slight changes in the South. Should these intentions be carried out and yields equal to the past ten years be obtained, a crop about one per cent less than the 1928 harvest would be produced.

Spring farm work has materially reduced country offerings of corn and receipts at the principal markets recently have been of only moderate volume. Arrivals since the first of November have totaled slightly less than for the corresponding period last season, when the crop was smaller. Stocks in the markets have not changed materially during the past month and at the first of April totaled about 37,700,000 bushels, or about 10,500,000 bushels less than a year ago. Exports have been relatively small during the past month but for the season to date have amounted to about 31,000,000 bushels compared with about 11,000,000 bushels shipped out during the corresponding period last season.

Industries and feeders are taking smaller amounts than a month ago and there is very little export inquiry. No. 3 Yellow corn was quoted April 10 at Chicago at 90¼ to 91½ cents compared with 96 to 97 cents a month ago and 96 to 97 cents per bushel a year ago.

OATS MARKET INDEPENDENTLY FIRM

A moderately active demand for the light marketings of oats has maintained a relatively firm tone in the oats market during the past month. Prices have declined only slightly and offerings are being readily taken with No. 3 white oats quoted April 10 at Chicago at 48½ to 49½ cents and at Minneapolis at 45½ to 47½ cents.

Oats seeding had made good progress to the middle of April. A slightly smaller acreage will be sown this spring than was harvested last year if farmers carry out their expressed intentions. The decrease, however, is confined to the East and North Central States, and more oats are to be seeded in the North Atlantic, South Atlantic, South Central and Western States.

The barley market has weakened during the past month, influenced by slow demand for all but the best malting qualities. Good malting barley is scarce and continues to be readily taken at steady prices. Best malting types were being quoted at Minneapolis April 10 at 67 to 68 cents and feed grades at 55 to 60 cents per bushel. Barley supplies are still large and offerings are easily equal to current market requirements. Stocks in the markets were reduced about a million bushels during the past month but were still relatively large, totaling at the first of April slightly over 10,000,000 bushels compared with about 4,500,000 bushels in store a year ago.

Notwithstanding the relatively low prices obtained for the 1928 barley crop, farmers have reported an intention to increase barley acreage about 6 per cent compared with that harvested last year. This increase appears to be general, being nearly 12 per cent in the North Atlantic States, 5 per cent in the North Central States, about 12 per cent in the South Central States, and nearly 12 per cent in the Western States.

COMPETITION STRENGTHENS FLAX MARKET

The flax market developed a firmer tone during the past month as a result of a better inquiry from crushers for the limited supplies. Market stocks of flax have been reduced to less than 700,000 bushels. No. 1 seed was selling at Minneapolis April 9 at \$2.43 to \$2.49, an advance of about five cents since the first of April. An increase of about 10 per cent in the 1929 flax acreage over that harvested in 1928 is intended, according to reports to the Department of Agriculture. Should these intentions be carried out about 2,990,000 acres will be seeded. This acreage with yields equal to the average of the past 10 years would produce around 23,000,000 bushels, which would be only a little over half the amount that was required for domestic purposes last year.

HAY, STRAW AND FEED

HALL HITS BLACKSTRAP TARIFF PROPOSAL

Edward T. Hall, vice-president of the Ralston Purina Company, intimates that a situation has arisen that may be extremely serious should the tariff on blackstrap molasses be increased. The domestic cane sugar interests supply only 7½ per cent of the blackstrap used for feeding animals. They cannot possibly supply the other 92½ per cent. They are anxious, however, to increase the duty actually by 2,500 per cent, which would place a nearly prohibitive burden on molasses—for feeding purposes.

TAR, GAS, ACID FROM STRAW

The cornstalk is not the only fibrous farm product which has an industrial future, according to Dr. Knight, in the Federal Bureau of Chemistry and Soils. There are other materials, such as straw, which may be converted into industrial products. By destructive distillation, straw can be worked into carbon, straw tar, illuminating gas, acetic acid, methyl alcohol and other products, says Dr. Knight, but at the same time, he warns that what is needed in the case of straw and other products is a careful determination of their comparative value as a fuel, a fodder, or a fertilizer, as against their value for commercial uses.

"To obtain such information," he declares, "the services of men of judgment who are versed in agriculture, chemistry and business management, are needed. Without such information the choice of a method for industrial utilization may be more or less of a gamble."

NO-CORN HOG FEED IN EUROPE

According to leading grain dealers in Hungary, the consumption of corn in their country has decreased considerably, due to the increasing popularity of wheat, barley, and oats, as hog feed.

Good results, in terms of pork, are reported from fattening feed of the following proportions: 60 per cent wheat, 27.5 per cent corn, and 12.5 per cent barley. Oat feed sometimes is substituted for corn, thus effecting a no-corn fattening ration for the swine.

As a result of this new feeding trend, there may be no necessity for importing corn into Hungary. Large consumers in certain districts where corn was purchased at high prices are said to be cancelling their orders or selling them on the Budapest market. There are also firms who purchased Argentine corn for Hungarian consumption, who are now trying to sell their orders in foreign markets on account of the tendency to cancel orders in their own country.

SHEEP, AS HAY EATER, EQUALS ONLY 11.8 JACK RABBITS

Jack rabbit engineers of the United States Department of Agriculture, after making life miserable for the leaping rodents on the hay plains of Arizona, report that in the innocent appearing rabbit, westerners have a genuine hay menace.

The studies indicate that on the average a jack rabbit will consume 0.68 pounds of green Alfalfa a day. According to the Arizona Agricultural Experiment Station, a 120-pound ewe sheep will consume approximately eight pounds of green feed a day. Hence, it would take the equivalent of only 11.8 jack rabbits to consume as much green forage as a sheep. A 750-pound cow will eat 40 pounds of green roughage in a day. Therefore, the equivalent of 58.8 jack rabbits would consume as much feed as a cow.

The average quantity of dry feed or Alfalfa hay consumed by a jack rabbit was 0.28 pounds a day.

A 120-pound ewe sheep will eat approximately four pounds of dry feed in a day; consequently, 14.2 jack rabbits would consume as much hay as a sheep. The consumption by a 750-pound cow is approximately 20 pounds of dry feed a day. Accordingly, it would take the equivalent of 71.4 jack rabbits to consume as much dry feed as a cow.

TOWN'S SIZE NO HANDICAP TO UPPER DELTA DEALER

Two thousand people strive, live, make their marks in life in Leland, Miss., in the northwestern part of the state. Not a large town, Leland is the center of a large territory, effectively serving its purpose. One of the population, W. R. Beard, not only serves his locality, but has extended his territory over the entire Mississippi Delta.

The Beard store front, reproduced here, would suggest that the owner began operations by placing a value on trim appearance, which would reflect the value of good merchandise in accurate light. But



A BAYOU STATE FEED OUTLET

good merchandise must represent a good variety. Mr. Beard emphasizes the fact that he sells and distributes everything in feedstuffs and field seeds.

The Beard method of building up a large territorial business is to secure distributor representation of every possible line, then have a traveling representative, backed up by advertising, who is constantly tapping his market, enlarging it.

The Beard service is the flexible modern method that permits buyers of all sizes to use it. A specialty is made of carload or less than carload lots. And customers know that no order can be too large or too small, or too varied in wants.

Such success shows that it is method, not millions that first make a business "big."

PIGS WILL ANSWER

Can oats be profitably fed to fatten pigs? Is it necessary to grind oats for pigs? What quantity can be fed with profit? Can anything be included in the trio supplementary mixture of tankage, linseed meal and alfalfa to make it even more efficient? Are minerals beneficial, particularly if the ration contains tankage and alfalfa? Will fish meal prove equal to the trio mixture for supplementing corn?

The feed dealer who could answer correctly these questions would possess knowledge that would bring him both repute as a dietician and profit as a seller of perfect feeds. But before he can answer these questions the pig must answer them.

The pig will answer them for farmers (and feed

dealers) when the laboratory animals of the Ohio Agricultural Experiment Station give public testimony of feeding tests on the Livestock Days at Wooster, April 19, Kenton, April 22, Columbus, April 24, and Cincinnati, April 26. By those dates the experimental feeding of the pigs will have been concluded and the results that will answer the questions will be known.

The Ohio Experimental Station will also show lambs, cattle and white rats which will answer similar feed questions.

CENSUS LISTS 447 FEED MILLS

According to data collected at the biennial census of manufactures taken in 1928, the total value of prepared feed made in the United States in 1927, was \$344,601,578. The total production was made up as follows: Feeds made chiefly from grain, 6,859,761 tons, valued at \$302,567,966; other prepared feeds, made chiefly from ingredients other than grain, valued at \$42,033,612.

The establishments in this industry are engaged primarily in the manufacture of prepared feeds for animals and fowls, from ground grains and other ingredients such as alfalfa meal, molasses, bone meal, cottonseed meal, etc.; and in grinding or crushing oyster shells for poultry.

Of the 447 establishments reporting for 1927, 57 were located in California, 36 in New York, 33 in Washington, 28 in Illinois, 21 in Missouri, 20 in Colorado, 20 in Pennsylvania, 17 in Ohio, 14 in Texas, 13 in Tennessee, 13 in Wisconsin, 12 in Alabama, 11 in Iowa, 10 in Minnesota, 10 in New Jersey, and the remaining 132 in 27 other states and the District of Columbia where several mills are located.

Summary statistics for the industry are given in Table 1, and statistics of products, by kind, quantity and value, in Table 2. (No comparable figures for 1925 are available.) These figures are preliminary and subject to such correction as may be found necessary after further examination of the returns.

TABLE 1.—SUMMARY FOR THE INDUSTRY, 1927

Number of establishments.....	447
Wage earners (average for the year)*....	7,632
Wages**	\$ 9,702,954
Cost of materials, mill supplies, containers for products, fuel and purchased power, total**	244,675,705

Materials, supplies and containers....	\$242,712,987
Fuel and power.....	1,962,718
Products, total value**.....	299,792,642

Prepared feeds	\$283,823,293
Other products	15,969,349
Value added by manufacture***.....	55,116,937
Horsepower	115,855

*Not including salaried employees.

**The amount of manufacturers' profits cannot be calculated from the census figures, for the reason that no data are collected in regard to a number of items of expense, such as interest on investment, rent, depreciation, taxes, insurance and advertising.

***Value of products less cost of materials, mill supplies, containers for products, fuel and purchased power.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY AND VALUE, 1927

Prepared feeds for animals and fowls, aggregate value	\$344,601,578
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Made in the "prepared feeds" industry.....	\$283,823,293
Made as secondary products of other industries	60,778,285

Prepared feeds for animals and fowls:	
Chiefly of grain*—	
Tons	6,859,761
Value	\$302,567,966
Chiefly of ingredients other than grain, value	42,033,612

*Includes 259,248 tons of alfalfa meal, valued at \$5,159,161.

**CUSTOM GRINDER SERVES 51
CUSTOMERS IN ONE DAY**

It is an established fact, yet an interesting one, that work well done, always commends itself. By reason of this fact any custom grinder can build up a business in his territory, second to none. And, if he is aggressive, his business can be developed to the point where he may operate his plant on a 24-hour basis.

This is what owners of the "Jay Bee" mill are doing. The Model Mill Company, Inc., Jackson, Tenn., operating a grinding business in Jackson, Tenn., Gettysburg, Tenn., and Union, Tenn., has operated their "Jay Bee" mills at each of these places for the past five years on a 24-hour basis. Only highest quality grinding, such as the "Jay Bee" gives could make a business like this continually profitable.

Fine, cool, uniform grinding, grinding that makes quality feed that is not "off color," because of metal shedding, the kind farmers want, and can get from "Jay Bee" grinding has built up the large and highly profitable business of the Charlestown Milling Company, Charlestown, Ind. It is no uncommon occurrence for this company to serve two or three dozen customers a day. And on one day last fall, 51 customers were served. And there was little waiting of each individual customer, for as the Charlestown Milling Company, Inc., says: "We don't know what breakdowns are with our 'Jay Bee'. We get every job out in a hurry."

Even though there be a quantity of grinding done the big factor that determines profit is the capacity per horse power per hour secured from your grind-



PLANT OF THE CHARLESTOWN (IND.) MILLING COMPANY

er. There seems to be undisputed evidence that here, again, the "Jay Bee" is a profitable mill for the custom grinder. The T. C. Power Company, Helena, Mont., in a competitive test got 150 pounds barley per horsepower per hour over a 5/16-inch screen, grinding in one lot 5,225 pounds at the rate of over 3,900 pounds per hour, using 26 horsepower. And this grinding was done on a five-year-old "Jay Bee." This shows not only maximum capacity but long life of the mill.

Illustration shows plant of the Charlestown Milling Company, Charlestown, Ind. On the day this photograph was taken feed was ground on a "Jay Bee" mill for 51 customers.

**WINTER LOWERS HAY SUPPLY AND
RAISES PEAK PRICES**

Hay supplies this spring are the smallest in recent years, states the Grain, Hay and Feed Market News Service of the United States Bureau of Agricultural Economics in its April review of the hay market situation. Heavy winter feeding caused by severe weather in the central and northwestern states reduced the season's surplus more rapidly than usual and stocks of practically all kinds of hay available for market for the remainder of the season appear to be only about half as large as a year ago.

CLOVER AND TIMOTHY FIRM

Alfalfa and Prairie hay markets have tended steadily upward since early in the season, while Timothy, Clover, and their mixtures have held firm. From present indications, the carryover of hay at the close of the season will be relatively small but an increased acreage of tame hay is in prospect

for the 1929 crop if farmers carry out their reported intentions.

ALFALFA STOCKS LOWEST

Alfalfa supplies appear relatively smaller than other classes of hay. The Alfalfa crop in 1928 was nearly 3,000,000 tons smaller than in 1927, with the most important reduction in production from a market standpoint in Kansas and Nebraska. The Kansas crop was about 575,000 tons smaller and the Nebraska crop about 665,000 tons below the 1927 harvest. Nearly 90 per cent of the Alfalfa available for market had been disposed of by the middle of March, according to reports from shippers. This compares with about 80 per cent marketed to March 15 last season and two years ago. When this percentage is applied to the smaller supply it appears that only about half as much Alfalfa remains to be marketed during the remainder of the season as was on hand a year ago.

The smallest supply was reported from California where dry weather and short pasturage has increased the demand for Alfalfa hay, but stocks in New Mexico and Arizona are also small and only from 10 to 15 per cent of the surplus remains to be marketed in Colorado, Kansas, Nebraska and other Alfalfa hay shipping states.

S. D. HAY MILLION TONS OFF '28

The increased demand for the tame hays has been reflected in materially increased marketings of Prairie. About 80 per cent of the surplus in the principal prairie producing states had been marketed to the middle of March compared with slightly less than 60 per cent last season. Marketings have been unusually heavy in Texas but from 80 to 85

per cent of the surplus has been marketed in Kansas and Nebraska. The 1928 Prairie hay crop was materially smaller than the 1927 harvest, particularly in the large producing states of the north-central group and in the southwestern areas. The crop in Minnesota was about 650,000 tons smaller than last year; in North Dakota about 345,000 tons smaller; in South Dakota over 1,000,000 tons smaller and in Nebraska around 500,000 tons below the 1927 harvest. With such a large percentage marketed to date the supplies for the remainder of the season is relatively small.

HAY SHIPMENTS RISE 20 PER CENT

While local consumption of hay, particularly in the central and northwestern states, has been unusually heavy this season because of the severe winter, the market movement has also been larger than last year notwithstanding the smaller crop, reflecting the increased demand in other areas. About 10,000 cars more hay, or an increase of about 20 per cent over last year's receipts, were received in the principal markets for the eight months period July through February. Receipts at all of the markets reporting were larger than last year but the greatest increases occurred at Cincinnati, Chicago, Omaha and Kansas City. At the latter market receipts from July 1 to March 1 totaled 16,917 cars compared with 13,317 cars for the same period last season.

At Omaha receipts this season totaled 5,065 cars against 3,784 cars a year ago. Arrivals at Chicago totaled 6,239 this season compared with 5,230 last season. Receipts in Cincinnati were reported at 4,406 cars to the first of March compared with 3,318 a year ago. Increases of from 100 to 200 cars over

last season's arrivals were reported at Boston, New York and Philadelphia. Increases in most other markets ranged from 200 to 600 cars. Exports and imports to date this season have been the smallest in years. Small quantities of Canadian hay have been shipped to the United States this season.

BIG HAY ACREAGE IN PROSPECT

Farmers have expressed an intention of increasing their acreage of tame hay to be cut in 1929 by 2.7 per cent above that of 1928. Should these plans be carried out the total acreage to be cut in 1929 will amount to 59,300,000 acres, which is larger than the acreage in either 1926 or 1928 but still 1,500,000 acres below the record acreage of 1927. While the intended increase in acreage is general in all sections except the North Atlantic, it is most marked in the East North Central States where winter killing of alfalfa and clover was heavy last year. Farmers in the alfalfa producing states of the Great Plains plan only about a 1 per cent increase in acreage.

With average yields on the intended acreage for the United States, a production of 89,000,000 tons would result. This would be slightly less than the five year average and less than the 93,000,000 tons cut in 1928. If the carryover from the 1928 crop is as small as now indicated, the supply of tame hay next season will be materially smaller than was available for the current year, unless yields are well above average.

FEED PRICES DROP IN NEW YORK

By C. K. TRAFTON

A condition approaching demoralization developed in the New York feed market during the month under review, some dealers describing the state of affairs as about the worst they had ever seen. With local distributors and consumers already well stocked and generally disposed to buy as sparingly as possible as the season of lighter consumption is drawing nearer, sellers found it almost impossible to move their feeds in spite of a further reduction of prices all along the line.

Local and Buffalo producers were not only confronted with continued competition from Canadian and outside domestic mills, but offers to sell at concessions were also received from jobbers in many sections, especially in the Northwest.

Spring Bran and Standard Middlings both fell \$4 at \$4.50 to \$31, while Red Dog is \$3.75 lower at \$39.50, and Flour Midds \$1.60 lower at \$38. Corn goods were featured by the establishment of a premium on Yellow Hominy over White. The latter was in ample supply and fell \$3 to \$38, while most of the yellow hominy mills were out of the market and offers are now at \$38.75, or only \$2.25 lower than a month ago.

The New York and Northeastern district demand for cottonseed oil meal has never been so light although prices are \$3.50 at \$5 lower than a month ago, 36 per cent being quoted at \$44.75; 41 per cent at \$47.60; and 43 per cent at \$50.60. Linseed oil meal is lifeless with 34 per cent quoted nominally at \$56.50.

The Beet Pulp supply is exhausted after sales of a few cars of imported pulp for April arrival at \$47.50 duty-paid, f.o.b. cars New York. No additional arrivals are expected as the European supply is also well cleaned up.

1929 HAY PRICES SET RECORD

Prices of practically all classes of hay have been generally above the market level of last season and have shown a steady upward trend for Alfalfa and Prairie. The market for Timothy and Timothy Clover mixtures has held firm at levels well above last season, but the seasonal advance has been less marked than for Alfalfa and Prairie. Timothy prices at the middle of March averaged about \$3.75 per ton higher at the principal markets than a year ago.

From the middle of July to the middle of October Timothy prices advanced sharply but since that time have held generally steady at about current levels. Prairie prices on an average advanced from about \$13 per ton at the middle of August to around \$16 per ton at the middle of March. This

is about \$3.25 per ton higher than at the corresponding time last season and reflects the active demand created for this class of hay by the shortage of Alfalfa and the relatively high prices asked for Timothy in the southern markets.

Alfalfa prices advanced from an average of about \$23 at the beginning of the season to \$29.25, the average price of No. 1 Alfalfa at the principal markets at the middle of March. Prices last season advanced about as much as during the current season but averaged about \$5 per ton lower throughout the season.

NEGATIVE RESULTS SHOW IN ORANGE FEED TEST

The dried orange pulp, introduced in dairy states as a valuable feed ingredient, has not been given official praise in the Badger State where feeding trials with it have been completed. Promoters of the sunkist pulp claim it is a carrier of vitamins A and D, but only negligible traces of these factors could be found.

In testing for vitamin A, a white corn, skim milk ration was fed to several groups of chicks also fed orange pulp. To provide the vitamin D on a white corn ration, they were irradiated with ultra-violet light 10 minutes daily. In no case was there found sufficient vitamin A to protect the chick from a deficiency of this nutrient; at a 100 per cent level some birds escaped collection of urates in the ureters, but at a 7 per cent level none of them escaped. The indications are that there was a trace of vitamin A, but not sufficient at any reasonable level at which this material could be included in a ration to protect against a vitamin A deficiency.

The vitamin D content was too low to protect the chick even when fed at a 10 per cent level. The ash content of the leg bones (tibia) of the birds receiving 10 per cent of this orange meal was never above 37 per cent, while the normal bird at six weeks contains from 45 to 48 per cent of ash. These results clearly stamp this pulp as a negligible source of vitamins A and D in poultry feeding.

FEED PRICES FAVOR APRIL BUYS

A limited demand for the principal feedstuffs reflecting the moderating weather and improved pastures was the major weakening factor in the feed market during second week in April, and prices declined sharply, states the weekly feed market review of United States Bureau of Agricultural Economics. Recent temperatures have been above normal in practically all sections east of the Rocky Mountains and meadows and pastures are rapidly becoming available. Linseed meal and gluten feed declined \$2 to \$4; bran, flour middlings and cottonseed cake and meal, 75 cents to \$1.50, and hominy feed, Alfalfa meal, standard middlings and shorts, 50 cents to \$1 per ton.

Offal production continued above that for the corresponding weeks of the past four years, but slightly below the output of a year ago. Flour production at the principal milling centers has declined since mid-March, but a part of this movement is seasonal.

BRAN DOWN \$1.50

Prices of wheat feeds were lowered about 50 cents to \$1.50 at most markets with bran showing the sharpest decline. Higher grade markets tended somewhat to steady the wheat millfeeds but demand was still very poor. Inquiry was dull in the Northwest, but the tone of the market appeared steadier with bids from central and eastern buyers for summer shipment at near present prices. Considerable northwestern feed has moved into the southwestern markets, according to trade reports. Demand was improved at Chicago at the lower price levels. Spring wheat feeds at eastern points were also easy. The Philadelphia market was quiet, but the liberal offerings at Buffalo met a slightly improved demand.

Price declines failed to stimulate inquiry for Soft Winter wheat feeds at Cincinnati, but the St. Louis market was displaying a firmer tone. Hard Winter wheat millfeeds were weak and lower. A somewhat freer selling attitude together with some resale and storage pressure sales against very little buying inquiry at the prevailing low price levels, featured the Kansas City market. Demand for the

liberal mill offerings was poor at Omaha and spot and future quotations were about equal. In the Southeast, Hard wheat mill feeds were slightly steadier, but buyers were only covering their immediate needs.

LINSEED LOWER

Linseed meal prices declined sharply and quotations at most points were \$2 to \$4 lower than a week ago. In the past month and a half the market has declined about half as much as it did during the five months of last year from the peak of prices in the spring to the lowest point reached in the following fall. The situation was very weak at Eastern markets with the small tonnage offered in excess of the demand. Mills in and near Buffalo were reported running at only about 40 per cent of capacity. Light offerings, however, tended to steady the Minneapolis market and 34 per cent protein meal was quoted unchanged from a week ago at \$50, and 30 per cent meal at \$46 per ton.

Cottonseed cake and meal markets were quiet with prices tending slowly downward. Offerings of seed were light at Atlanta and were quoted delivered at \$46 per ton, prime basis. The demand for cottonseed cake and meal at Atlanta and Memphis was dull, but slightly improved over that of a week ago. Mill stocks at both markets are fair to heavy and mills are reluctant to sell at the lower prices. The market in the central west was lower but a firmer undertone was developing at Kansas City, due to higher futures and increased interest shown, principally in the corn belt.

Liberal offerings of gluten feed met a slow demand and prices at the principal markets declined sharply. The situation at eastern points was weak with some independent mills discounting the market about \$1 per ton to effect sales. Mill production and movement at Buffalo was fair. The market was \$3 lower at Chicago where bulk feed was quoted at \$36, sacked feed at \$38.65 and meal on a basis of \$48.65 per ton.

Hominy feed prices held fairly steady despite the weakness in other feeds. Offerings at Buffalo were light and about offset the slow demand. Mill output was small, but stocks were of fair volume. The Chicago market was inclined toward moderate firmness with light offerings and a fair demand.

GREEN FEED STEADY

The alfalfa meal market was quiet with prices holding about steady. Lower grades were slower sale at Chicago than better grades and choice was quoted at \$34.50, No. 1 \$32, and No. 2 \$28 per ton. Kansas City was dull and No. 1 was nominally quoted at \$28 per ton. Demand for mill and other feeds was falling off readily in the Pacific Coast and intermountain markets although prices were holding fairly steady.

FEEDMEN FORM POULTRY MART

Supposing your local territory were to undertake to improve and increase the poultry production and egg industry. You would be interested, would cheer the proposal, might co-operate in many little ways. What happened when King County, Wash., undertook to increase poultry production was, that three feed companies organized the Mutual Egg and Poultry Market, a non-profit organization to assist in the development.

The feed companies organizing the Market are the Gateway Feed Company, under the direction of manager D. G. McIntosh, and the Murphey Feed Company, under the direction of E. W. Murphey, both of Enumclaw, Wash., and the France Bros. Feed Company, of Buckley, Wash.

"We are interested in a greater and improved type of production of poultry in this section," stated Mr. McIntosh, "and we readily believe that our action will result in a more stabilized market for poultry products. It is a non-profit organization and has the possibilities of bearing a real influence on the produce market in this section."

The organization of the market began several months ago, and filing of articles of incorporation were made just recently. The Gateway Feed Company and the Murphey Feed Company will be receiving stations at the present time, but eggs will

also be received by France Bros., in Buckley, and candling will be done in both towns. The market will maintain an expert on poultry problems, ready to assist raisers at all times. More poultry, more feed.

NEW YORK HAY HIGHER

By C. K. TRAFTON

Reflecting irregularity in the volume of the arrivals, prices in the New York hay market moved with considerable irregularity during the past month, but on the whole the average was higher as the weekly arrivals at railroad yards barely averaged 30 cars; and during one week only 19 cars were received at all terminals.

The generally light rail receipts might have resulted in a further advance had it not been for the arrival of a river boat carrying about 1500 bales. This caused an easier tone temporarily late in March, but subsequently there was renewed firmness.

During the week when arrivals were at a minimum an almost sold-out condition developed at some yards, and especially in Brooklyn, and as a consequence the market was decidedly strong. The meager arrivals, excepting very poor grades, sold promptly at full prices as demand was fair practically throughout the month and especially for choice grades. The latter still made up a very small percentage of the arrivals, including almost no real No. 1 hay and only a few cars of good No. 2. As a consequence quotations for the top grades were almost entirely nominal.

Buyers in search of really choice hay still found it necessary to substitute the best selections available of lower grades and the latter, consequently, were relatively strong.

NEW FEED BRANDS

"NOPCO" for poultry and stock foods containing a vitamin preparation obtained from cod-liver oil. National Oil Products Company, Inc., Harrison, N. J. Filed September 27, 1928. Serial No. 273,061. Published March 19, 1929. Claims use since January 24, 1928.

"IDEAL" for Bran. Bernet, Craft & Kauffman Milling Company, St. Louis, Mo. Filed December 10, 1928. Serial No. 276,513. Published March 19, 1929. Claims use since 1905.

"DECREAMCO DAIRY RATION" for stock food. Detroit Creamery Company, Detroit, Mich. Filed January 28, 1929. Serial No. 278,533. Published March 19, 1929. Claims use since on or about October 15, 1928.

"ROSE'S REDI-RATION" for animal feed—namely dog and puppy feed. Granville P. Rose, Jr.,



IDEAL
PURE WINTER
WHEAT BRAN



VITAMONT
ROSE'S
Redi-Ration



DECREAMCO
DAIRY RATION



NOPCO

Completo
Sea Meal

doing business as G. P. Rose & Co., Nashville, Tenn. Filed December 29, 1928. Serial No. 277,382. Published March 26, 1929. Claims use since October, 1928.

"COMPLETO SEA MEAL" for livestock feed. The Park & Pollard Company of Illinois, Chicago, Ill. Filed January 4, 1929. Serial No. 277,595. Published April 2, 1929. Claims use since August 1, 1928.

"VITAMONT" for dog food. The Vitamont Sales Company, Butte, Mont. Filed February 16, 1929. Serial No. 279,510. Published April 2, 1929. Claims use since August 25, 1928.

ASSOCIATIONS

CONVENTION CALENDAR

April 17-18.—Convention for 1929 of the Western Grain Dealers Association, Hotel Roosevelt, Cedar Rapids, Ia.

April 27.—Spring meeting of the Western Seedmen's Association at the Hotel Fontanelle, Omaha, Neb.

May 6-10.—The American Association of Cereal Chemists convenes at the Hotel President, Kansas City, Mo.

May 14-15.—Thirty-second annual meeting of the Kansas Grain Dealers Association in the Broadview Hotel, Wichita, Kan.

May 14-15.—Illinois Grain Dealers Association meets at Peoria, Ill.

May 21-23.—Convention of the Pacific States Seedmen's Association, Hotel Del Monte, Calif.

June 4-5.—Annual convention of the Central Retail Feed Association at the Plankinton Hotel, Milwaukee, Wis.

June 6-8.—American Feed Manufacturers Association's 1929 convention, French Lick Springs Hotel, French Lick, Ind.

June 9.—Mid-year meeting of the Nebraska Farmers' Elevator Managers' Association at Horsky's Park in Crete, Neb.

June 17-18.—Montana Farmer Grain Dealers Association's third convention, at Havre, Mont.

June 24-25.—The Farm Seed Trade Association meets at the Hotel Sherman in Chicago, Ill.

June 26-28.—Meeting of the American Seed Trade Association, Chicago, Ill.

July 8-10.—Thirty-sixth annual convention of the National Hay Association, Hotel Secor, Toledo, Ohio.

October 14-16.—The Grain Dealers National Association convenes for the thirty-third time, Hotel Pere Marquette, Peoria, Ill.

October 14-16.—Annual meeting of the Chief Grain Inspectors National Association, Hotel Pere Marquette, Peoria, Ill.

October 14-16.—Terminal Grain Weighmasters' Association's 1929 meeting, at the Hotel Pere Marquette, Peoria, Ill.

ILLINOIS DEALERS HAVE BUSY SPRINGTIME

Activities of the Illinois Grain Dealers Association have multiplied and taken on subjects from legislation to the problems of the annual meeting. Concentrating its work in the hands of Secretary W. E. Culbertson, the association is attacking the Thresherman's Lien Law and defending the house bill that would give the Chicago Board of Trade the right to deal in securities as well as grains.

Excerpts from Mr. Culbertson's report, showing the attitude of the Association, follows:

President Hoover had agreed to discuss with representatives of the organized grain trade the question of farm relief legislation. (This conference was held on Wednesday, April 10, at 11:30 a. m.) Your secretary will represent the Illinois Association, and the committee to see the President will be made up of the Legislative Committee of the National Association and delegates from the various state organizations. The outcome of this conference will be furnished to you in another bulletin upon my return. Grain Dealers expect to show the extent and value of their service to agriculture. (See Page 603.)

House Bill No. 361, amending the present Thresherman's Lien Law by requiring that notice be given the grain dealer in order to make the lien effective, has been advanced to a third reading in the House and its early passage is looked for. Grainmen believe this will force them into being a "collection agency."

The Convention Committee of the Peoria Board of Trade, for our Annual Meeting in Peoria, May 14 and 15, advise that they have arranged with the Hotel Jefferson for our banquet and that they will have a speaker of national reputation, besides good entertainment. Special stress will be given to entertaining visiting ladies, namely luncheons and theatre parties. Our meeting in Peoria should bring out a goodly number of grain dealers and I suggest that it is not too early to make your hotel reservations.

The Chicago Board of Trade, desiring to extend its activities to include trading in stocks and bonds, had introduced in the Legislature House Bill No. 167, which simply amends the Securities Act giving to the Chicago Board of Trade the same privileges as are now enjoyed by the New York, Chicago, and Boston Stock Exchanges. This bill is

reported out of the Committee with the recommendation that it do not pass, however there will be an effort made to muster enough votes to pass it over the Committee's recommendation and the Members of the Chicago Board of Trade would be very grateful if you would do two things: First, go to your bankers and request them to ask their senators and representatives to support House Bill No. 167, known as the Board of Trade Bill; second: that you write, telegraph or personally see your senators and representatives asking them to support this bill.

SCALE MEN CONVENE

Two hundred and twenty-five scale men attended the national convention of their association held in Milwaukee April 9 to 11. One of the largest and most successful of their conventions, the meetings marked a real progress for the association and profession.

Of interest not only to grain and scale men but to all branches of industry with scale problems will be the publication of a handbook on scales. Authorization of the publication was given at the meeting. It will not only be a reference book for scale men but contains formulas for materials, manufacture, construction and installation of scales valuable to mechanic, engineer and lay scale users. Costing between 10 and 20 thousand dollars to edit and print, the handbook is to be the most complete reference of its kind.

Railway weighing problems received special at-

tention and was covered from every angle. Of interest to grainmen is the presentation of a new type railway scale with special features that free it from the new restricted mechanical possibilities of present railway scales, permitting it to be used for oil, cotton, and coal as well as grains.

The election of officers brought C. F. Hawkinson, former chairman, and scale inspector for the Chicago Board of Trade, into the presidency. C. C. Hosford, general scale inspector for the Pennsylvania Railroad, was elected vice-president, and Neal Dugger, chief inspector for the Tennessee Coal, Iron and Railroad Company, secretary and treasurer.

E. D. Gordon, chief engineer of the Buffalo Scale Company, becomes chairman of the executive committee, and A. C. Johnson, H. A. Juneau, state weighmaster of the Wisconsin Grain and Warehouse Commission, and R. S. Burnside members of the executive committee. H. O. Rask was made sergeant-at-arms.

The meeting was attended by leading men in every branch of industry, including weighmasters from all the terminal markets and heads of the government Bureau of Standards.

OHIO DEALERS MAY INCLUDE FEEDMEN IN GROUP

Members of the Ohio Grain Dealers Association will shortly be asked their opinions on including feed dealers of that state in the association. W. W. Cummings, secretary of the group, is circularizing members.

If it is decided to include the feedmen, the dealers would also have to vote, according to the circular issued by the secretary, on changing the name to Ohio Grain and Feed Dealers Association. The movement for the combination was motivated by the progress of feed men in that state and the thought that the unified group might prove more beneficial for all concerned.

TRANSPORTATION

SOUTHWEST-NORTHWEST RATE BATTLE NEARS END; PRESENT RATES STAND

Official recommendation was made to the Interstate Commerce Commission by its examiners, on April 13, that present rates be unchanged on wheat and flour east of Chicago from mill points in the Southwest and Northwest. A final order, the reverse of that asked by the Southwest, is expected.

WOOD-LINED STEEL CARS FOR CANADIAN GRAIN

Designed especially for transporting grain from the prairie provinces to the Great Lakes and Pacific Coast, a large "fleet" of steel grain cars are being turned out in eastern railway shops.

Each car will carry 2,000 bushels of grain. All joints are riveted, while the interiors will be lined with seasoned wood. The cars will measure 40¾ feet long, 8½ feet high, and 8 feet, 7½ inches wide.

ELEVATOR COMPANY CLAIMS REPARATION ON EXPORT BEANS

The Sheffield Elevator Company, Minneapolis, Minn., has filed complaint with the Interstate Commerce Commission against the Canadian National Railways. The company claims reparation in the amount of \$534.34 is due on cull beans shipped from various points in Michigan and Ohio, to ports in Maryland, Pennsylvania, New Jersey, and New York, for export.

GEIS-WHITE CASE FAILS

The Interstate Commerce Commission this month announces dismissal of the grain rate complaint brought against the Atchison, Topeka & Santa Fe Railway Company by the Geis-White Grain Company.

Carload rates on wheat and coarse grain from Beaver, Okla., to Ogden, Utah, and certain destinations on the Pacific Coast were found "not unreasonable or otherwise unlawful," as the grain firm charged.

HIGH HAY RATES GO INTO EFFECT ON APRIL 20

Establishment of minimum rates on hay and straw for application in connection with the joint class rates on these commodities between official and southern territories has been authorized by the Interstate Commerce Commission. The schedules, operation of which previously had been suspended, become effective April 20.

The conclusions of the commission in Investiga-

tion and Suspension Docket No. 3174, follow in full text:

By schedules filed to become effective September 30, 1928, respondents proposed to establish certain minimum rates to be applied in connection with joint class rates between official and southern territories. Upon protest of the Merchants Exchange of St. Louis, Mo., the Board of Trade of Cincinnati, Ohio, and certain other organizations, operation of the proposed schedules was suspended until April 30, 1929. Subsequently the suspension order was vacated except as it related to carload rates on hay, straw, and certain other similar commodities, and this report deals only with these articles.

We find that the suspended schedules have been justified, except in so far as they relate to points to which Ronoke rates are proposed as minima, on and west of the lines of the Clinchfield, the Charleston & Western Carolina from Spartanburg to Augusta, and the Georgia & Florida from Augusta to Madison and that as to such points they have not been justified. The order of suspension will be vacated as to those portions of the schedules found justified, and the other portions will be ordered canceled without prejudice to the filing or other schedules conforming to the views expressed in this report.

Commissioner McManamy, dissenting: Under the Hoch-Smith resolution agricultural products such as those here before us are entitled to special consideration. In view of this, I believe that the ninth-class rates between points in official and southern territories should be established as maxima at intermediate points instead of observing the official territory rates as minima.

REFUND ON OATS RATE

The rate charged on a carload shipment of oats from Lenock, N. D., to Athens, La., has been declared "inapplicable" by the Interstate Commerce Commission. The Hales & Hunter Company, Chicago, was shipper and claimant in the complaint.

The Chicago & Alton Railroad has been ordered to refund the overcharge. The rate charged was legal up until the oats reached East St. Louis, Ill.

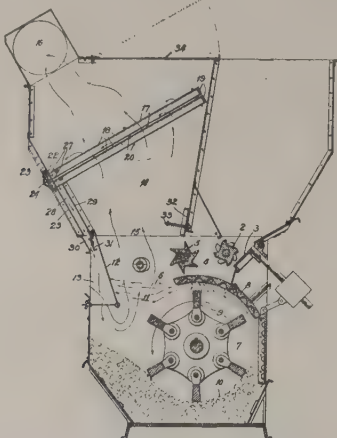
THE Central States Grain Co-operative, Inc., has filed suit at Indianapolis, Ind., for \$20,000 against several grain insurance companies for grain destroyed in the Indianapolis Public Elevator fire, November 2, 1928. The Nashville Warehouse & Elevator Company is also made defendant in the suit.

GRAIN TRADE PATENTS

Bearing Date of January 22, 1929

Pulverizing Device and Method. Henry G. Lyken, Minneapolis, Minn. Filed November 3, 1924. No. 1,699,849. See cut.

Claim: A pulverizing apparatus comprising a pulverizing chamber provided with pulverizing means, an expansion chamber connected with the pulverizing chamber so that the pulverized material may be drawn thereinto, a screen positioned in the expansion cham-

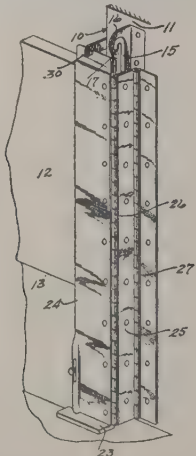


ber a substantial distance from the inlet opening of said chamber, said screen being extended approximately across the entire cross sectional area of the expansion chamber so as to equalize movement of the pulverized material through the last mentioned chamber.

Bearing Date of March 5, 1929

Grain door for cars. Fred M. Bailey, Minneapolis, Minn. Filed December 6, 1926. No. 1,704,420. See cut.

Claim: The combination with a car body having a door opening of a displaceable door for said opening mounted for vertical swinging movement to and from a closed position, substantially flat joint plates hinged to the car body and extending perpendicular to the respective side thereof at the vertical edges of the door, sub-

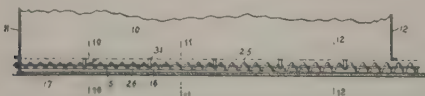


stantially flat clamping plates hinged to the free edges of the joint plates and extending substantially at right angles from the joint plates and overlapping the inner face of the door at the vertical edge portions thereof and engaging said door to form tight joints between the car body and door, said joint plates and clamping plates extending substantially the full height of the door, and fastening means for securing the clamping plates in operative positions to the car body.

Bearing Date of March 12, 1929

Conveyor for Discharging Bins. Gustav Bernhard Eggert, assignor to Baker Perkins Company, Inc., Saginaw, Mich., a corporation of New York. Filed March 3, 1926. No. 1,704,731. See cut.

Claim: In an apparatus for discharging storage bins, a bin having slanting sides, a housing connected to the slanting sides of the said bin, a conveyor shaft extending in the said housing from its outlet to its opposite closed end, hangers carried by the said housing for supporting the said shaft, a plurality of screw conveyor spirals fixed to the

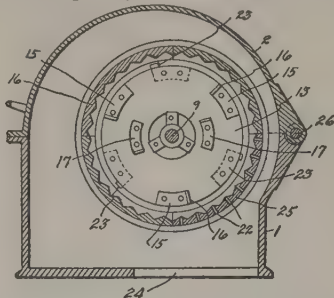


said shaft between the said hangers and divided into a distinct number of sections, the spirals of each section having the same diameter, but the diameters of the different sections increasing in length from that section nearest to the closed end of the said housing to the outlet hereof, a plurality of half-circular troughs, corresponding to the said sections and arranged coaxially to the said shaft, and in all sections at an equal distance from the corresponding spirals rotating therein, and bridges connecting the said troughs.

Pulverizing Mill. John Mead, Jr., Detroit, Mich. Filed September 29, 1926. No. 1,704,757. See cut.

Claim: In a pulverizing mill, a housing adapted to receive material to be pulverized, a series of rotatable

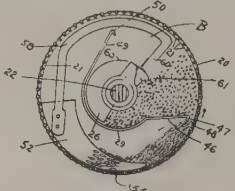
beaters within the housing, the housing being provided with a pair of annular grooves, a series of arcuate screens positioned in end to end relation in



the annular grooves and forming a complete circle about the beaters, the inner surfaces of the screens being formed to provide a series of pyramidal points, one or more of the screens being provided with perforations through the pyramidal points.

Grain Separator and Recleaning Device. Haakon Mjolsness, Minneapolis, Minn. Filed October 2, 1925. No. 1,705,302. See cut.

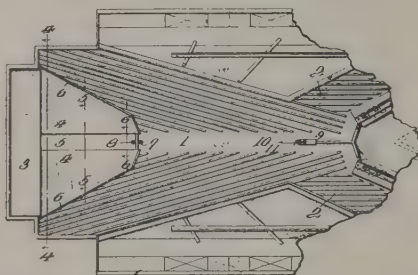
Claim: A grain separator and recleaning device including a separating trough in said separator a grain receiving cylinder having means for carrying grain in the surface thereof to raise the same to said



separating trough and an independently adjustable retarding means disposed in and substantially at right angles to the longitudinal axis of said cylinder adapted to hold the grain at a predetermined level in said cylinder for the purpose specified.

Apparatus for the Separation of Dry Materials. Henry M. Sutton, Walter Livingston Steele, and Edwin Goodwin Steele, Dallas, Texas. Filed June 6, 1923. No. 1,705,342. See cut.

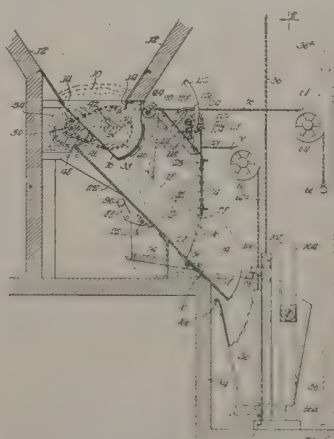
Claim: The combination of a dry separating table having a previous air cushion separating deck provided with a plurality of riffles extending forward from opposite sides of the deck and stopping short of its central portion thereby leaving an unobstructed



longitudinal central portion, the table being inclined upwardly from the feeding end and adapted for longitudinal reciprocation, and a feeding device located at the lower end of the table adapted for feed material to the unobstructed portion of the deck only, for the purpose described.

Automatic Feeder. Frederick N. Whitesell, Chicago, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois. Filed May 31, 1921. No. 1,705,885. See cut.

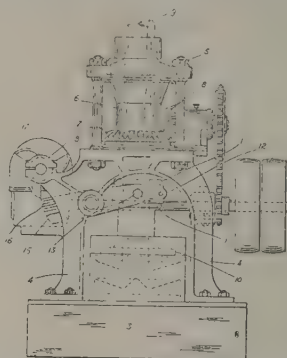
Claim: In a mechanism of the class described, a hopper, a measuring chamber communicating therewith and having an inclined floor over which the material rolls or slides during its entire passage through the measuring chamber, said chamber having top and bottom material ports, a door at the bottom port, means for controlling the upper port, and means



intermediate of the ends of said chamber and out of the direct path of the material adjustably projectable across the path of the material through the said chamber, for varying the effective capacity of the measuring chamber; the floors of the hopper, the measuring chamber and the lower port door being inclined substantially at the same angle.

Crushing and Grinding Machine. Amos Campbell Hemey and John Stoneham, Sydney, New South Wales, Australia. Filed February 10, 1927, and in Australia February 19, 1926. No. 1,706,290. See cut.

Claim: In an improved crushing and grinding machine of the kind described, the combination of a frame, a vertically extending feed tube adapted to carry a miller, and a driven sleeve mounted in the

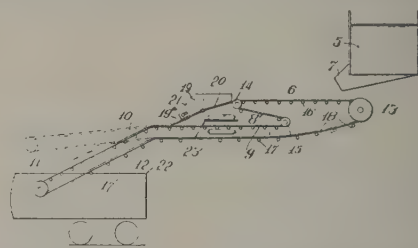


said frame, said vertical feed tube being connected to the sleeve for rotation therewith and for reciprocating movement therein and means, including a lever to reciprocate said tube.

Bearing Date of March 19, 1929

Mixing Conveyor. Andrews Allen, Glencoe, Ill., assignor to Allen & Garcia Company, Chicago, Ill., a corporation of Illinois. Filed September 15, 1926. No. 1,706,203. See cut.

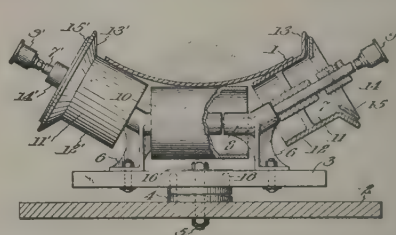
Claim: A mixing conveyor including an endless belt arranged to provide a table to receive material thereon from a source of supply and a delivery portion, the belt being disposed with its upper run diverted at the end of the table portion out of the plane thereof and out of the plane of the delivery portion thus forming a gap in the direction of move-



ment of the mass, a chute bridging said gap adapted to deliver the mass from the table portion to the delivery portion of the conveyor, said chute having a gate therein, a second conveyor disposed in angular relation to said first conveyor and arranged below said gate, and means for delivering material from said second conveyor onto the delivery portion of said first conveyor.

Belt Conveyor. Edward Cuddihy, Tooele, Utah. Filed May 24, 1927. No. 1,705,558. See cut.

Claim: A self-aligning troughing idler unit comprising a base, a pair of inclined and oppositely disposed idler pulleys for carrying the opposite edges of a belt, each of said pulleys having the form



of a cylinder terminating in an outer conical flange, means on said base supporting said pulleys for rotation about their respective axes, and means pivotally supporting said base for rotation about an axis located beyond the axes of said pulleys.

RECENT HAINES FEED MIXER
INSTALLATIONS

Installations of Haines Feed Mixers, built by the Grain Machinery Company of Marion, Ohio, have been made in the plants of the following companies, the No. 1 size being of 40-bushel capacity, and the No. 3 size of 80-bushel capacity:

The Economy Feed Mills, Colorado Springs, Col., No. 3; The Garver Brothers Company, Strasburg, Ohio, No. 1; Bluffton Milling Company, Bluffton, Ohio, No. 3; Restwood Poultry Farms, Washburn, Wis., No. 1; Smith Bros. Company, Canandaigua, N. Y., No. 1; Farmers Union Co-operative Association, Manhattan, Kan., No. 1; Wamego Milling Company, Wamego, Kan., No. 1; Owings Brothers, York, Pa., No. 1; The Farmers Exchange, New Freedom, Pa., No. 1; Jones Feed Mill, Durant, Okla., No. 1; Anoka Feed Company, Anoka, Minn., No. 1; Acme Mill & Elevator Company, Friend, Neb., No. 1; Dobling Bros., Lost Nation, Iowa, No. 3; Mt. Vernon Farmers Exchange, Mt. Vernon, Ohio, No. 3; Farmers Grain & Supply, Modoc, Ind., No. 1; Oliver O. Morton, Crescent City, Calif., No. 1; Ovie's Poultry Farm, Marion, Ind., No. 1; Raabe Bros., Rimer, Ohio, No. 1; Raabe Bros., Vaughnsville, Ohio, No. 3; Jenera Co-operative G. & S. Company, Jenera, Ohio, No. 3; Idaho Egg Producers, Twin Falls, Idaho, No. 1; A. L. Heckman, Shippensburg, Pa., No. 1; Lander Mills, Lander, Wyo., No. 1; Harrison & Blodgett, Albion, N. Y., No. 3.

FIELD SEEDS

SEED PROPAGANDA RESULTS IN NEW MILL BUILDING

In several states, notably in Kansas and Illinois, seedsmen for some time have actively promoted the distribution of soya bean seed. As a result, crops of this feed and oil bean are of a proportion attractive to bean milling interests. Atchison, Kan., and Peoria, Ill., are the points where two new bean processing plants are now in operation. They have a combined capacity of 4,000 bushels per day.

A short ton of soya beans (33½ bushels) produces 240 pounds of oil when crushed and 1,620 pounds of cake or meal. The remaining 140 pounds is moisture waste.

SEED NEWS FROM INDIANA

By W. B. CARLETON

Both wholesale and retail seed dealers in Indiana report that trade was rather active during the month of March and showed an increase over the corresponding period of last year. It is expected that trade will continue active during the months of April and May. Reports from many parts of the state are to the effect that there is a shortage of good seed corn in many localities.

Members of the Rotary Club at Shelbyville will assist and encourage the organization of a corn club for Shelby county boys, it was announced a few days ago at Shelbyville.

Louis L. Kindermann, seed dealer at Boonville, who had a bad attack of pneumonia during the last part of the winter, is still confined to his home and has not been able to get to his work.

John K. Jennings, manager of the Diamond Feed Mills at Evansville, and well known among the seed dealers of southern Indiana, has formally announced his candidacy for mayor of Evansville on the democratic ticket.

Christian Held of Cannelton has been re-elected county agricultural agent of Perry County, for another year.

A large percentage of oats harvested last fall will not be satisfactory for sowing, the Indiana Grain Dealers Association has warned. Although most of the crop was thrashed under favorable conditions, it is being found daily in making germination tests that only a small percentage will make good seed.

Although there were only 1,695,000 acres of Winter wheat seeded in Indiana last fall, compared with 2,260,000 acres in the fall of 1927, the condition of the crop is much better this year than it was at the same time last year that a greater yield is expected by the experts of Purdue University at Lafayette. Bad conditions a year ago, including winter killing, caused 60 per cent of the wheat acreage to be abandoned in the spring and only 900,000 acres of the 2,260,000 acres seeded eventually were harvested, yielding the shortest crop since the Civil War. Reports from many parts of the state say that the crop is looking unusually promising at this time.

J. A. McCarthy, Evansville seedsmen, has returned from a trip to Terre Haute, where he looked after his branch seed house that is being managed by Frank Pritchett.

Indiana farmers reporting on Minota oats yields to the committee of Indiana Corn Growers' Association, reported 10 to 25 bushels more oats per acre than from others grown in their communities.

A storage company has been organized and incorporated at Owensville, Ind., and Manfred L. Lowe of that town has been elected as president of the new organization.

Thousands of samples of soil from farms along the Chicago and Eastern Illinois Railroad Company were tested by specialists during the operation of the soils-testing special which visited all the important towns along the railroad in Indiana late in the month of March. Farmers who visited the train and brought samples of soil from their farms were given free testing service, with recommendations on liming, fertilizing and rotation of crops.

The result of the first seed corn testing under the direction of Virgil D. Sexson, Green County agricultural agent, indicates farmers should exer-

cise great care in the choice of seed if they expect a good stand of corn. Sexson has tested 1,010 ears and the result shows 27 per cent was unfit for seed. Of the 27 per cent one ear was listed as dead, 64 as diseased and 208 were classed as weak.

PROFIT AND LOSS IN WHEAT CLEANING

The loss penalties of dirty or contaminated wheat need no proof to make the elevator man understand. His experience has been too real. But there is also a profit to be extracted from it now—the revenue from the custom cleaning of wheat for farmers.

Losses from waste making weeds in wheat can

grain of seed wheat. Cool moist weather makes the fungus thrive, germinates spores and seed wheat simultaneously. Thereafter the fungus growth goes apace with wheat growth, finally to rule when the head is formed, developing smut balls instead of kernels of good wheat.

Perfect preventive would be the possibility of control by resistant varieties of wheat. But such, adaptable to principal wheat growing regions, are not now available. Therefore seed treatment for smut control is the chief reliance at this time. This latter offers a profitable combination of treating and cleaning operations for elevator managers and mill owners interested in cultivating such a custom enterprise.

The copper-carbonate treatment is now in general use, and has permitted the development of the idea of continuous treatment by power machines. This treatment can be successfully combined with cleaning machines to make a cleaning-smut treating plant applicable as a central plant or portable one. Accompanying this article is a side view design for a power driven combination grain cleaning-copper-carbonate dusting machine installed on a motor truck. A portable plant has its obvious advantages in the wider range of service it can give.

Full details of treating and of machine design can be had from the Bureau of Agricultural Economics, if Leaflet No. 33 is asked for.

MARKED IMPROVEMENT IN SPRING SEED DEMAND

With the advance of the season and more favorable weather conditions, the demand for seeds made further improvement during the week ended March 30, according to the Bureau of Agricultural Economics. In some markets the busiest week of the season was experienced.

Demand began to show a slight improvement upon the entry of March but heavy snows and severe winter weather had worked against any marked activity. Fields and roads were in such condition that retail trade was not active and most of the work in the larger markets consisted in the filling of orders which had been previously booked. With the moderation of the severe weather, sales increased somewhat although the wet condition of fields and roads prevented free access to them by farmers and thus retarded buying up to the middle of March. From then on favorable weather tended to extend activity. In contrast with a year ago, prices of most kinds were well maintained and advances outnumbered declines.

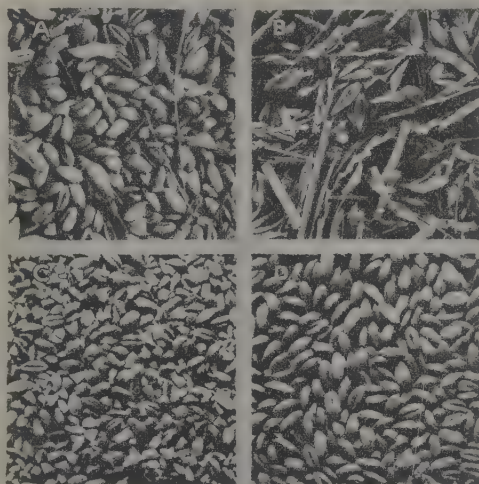
Red clover prices March 30 were about 15 cents per 100 pounds higher than on March 2, and Alsike and White Clover were 35 cents to 50 cents higher. Sweet Clover and Alfalfa advanced five cents and 10 cents. On the other hand, Timothy, Redtop, Kentucky bluegrass, and meadow fescue declined 10 cents to 25 cents. The millets and sorghos were inactive and price changes, small. Sudan grass declined about 20 cents while rape advanced five cents and hairy vetch 25 cents. Soybeans and cowpeas advanced 35 cents and 50 cents, respectively. Seed corn advanced 10 cents per bushel, seed wheat declined five cents per bushel, while most of the other seed grains were unchanged.

Demand continued very active for Red Clover. Prices were firm in all markets. Domestic advanced 25 cents per 100 pounds in one market and 50 cents in another. Imported seed at \$22.75 was up 25 cents in one market. Arrivals from Europe continued heavy as 532,200 pounds arrived at two Atlantic ports during the week compared with 368,700 the week before and 30,000 pounds during the corresponding week last year. Of this quantity about 369,800 pounds came from France and the remainder from Germany, Danzig and Great Britain.

Alsike clover was again in good call. A further advance of 60 cents was made. During the week about 22,000 pounds from Germany were received, subject to the Federal Seed Act at one Atlantic port. Crimson clover remained unchanged at \$12. White Clover came into somewhat greater call. Sweet Clover demand was very good in two or three markets but only fair in others. Practically no price changes took place. Alfalfa demand showed but little improvement. Prices of the week before prevailed.

The grasses, with one or two exceptions, were firm and in greater call. Timothy was more active and prices were advanced five cents and 10 cents in two markets. During the week about 81,300 pounds left one Atlantic port for Great Britain and Germany, compared with 132,700 the week before and 1,500 pounds last year. Redtop prices continued the

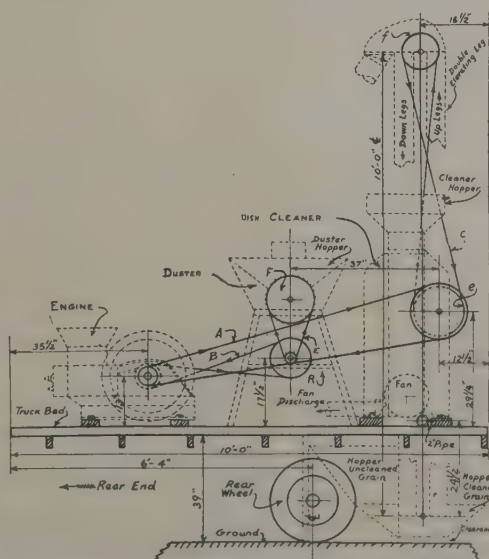
(Continued on Page 624)



WHEAT CLEANED WITH A PORTABLE POWER-DRIVEN COMBINATION CLEANING-DUST TREATING MACHINE: A, ORIGINAL GRAIN FILLED WITH WEED SEEDS, FOREIGN MATERIAL, SMUT BALLS; B, WILD OATS, COARSE FOREIGN MATERIALS; C, SMALL WEED SEEDS, BROKEN SMALL SIZED WHEAT KERNELS REMOVED IN CLEANING; D, SEED WHEAT AFTER CLEANING AND DUSTING WITH COPPER-CARBONATE DUST.

be reduced by using the weed seeds and wheat kernels removed in efficient cleaning as feed for poultry and livestock.

Most serious enemy of wheat is stinking smut, or bunt, a parasitic fungus. Harvest time finds the



SIDEVIEW OF COMBINATION POWER-DRIVEN GRAIN CLEANING AND COPPER-CARBONATE DUSTING PLANT, TRUCK INSTALLATION: A-BELT, MAIN DRIVE BELT FOR MACHINERY OPERATION; B-BELT, OPERATING DUSTING MACHINERY; C-BELT, LOCATED ON OPPOSITE SIDE, DRIVES DOUBLE ELEVATOR LEG.

diseased plants producing heads filled with smut balls containing a mass of powder instead of wheat kernels. Evil-smelling, the powder will show, under the microscope, that it consists of spores of the fungus. It is these that scatter through the wheat in threshing. This smut got in the plant, most probably, because a few spores were present on a



EASTERN

The safe of the Federal Mill & Elevator Company at Camillus, N. Y., was recently robbed of \$136.

Graves & Brown, Inc., of Springfield, Mass., has been organized to deal in grain, feed, flour and cereals. James E. Kimball is president.

The New England Grain Products Company of Boston, Mass., has been granted a charter to deal in grain, feed, flour and cereals, and to manufacture food products from grain and cereals; also to acquire elevators and mills for production and storage. Charles M. Cox is president; Herbert L. Hammond, treasurer, and Linus C. Coggan, clerk.

IOWA

The C. B. & Q. Elevator at Council Bluffs, will have a 500,000-bushel addition shortly.

L. G. Doran has purchased the Rohrer Grain Company of Beaver. The consideration was \$9,050.

The Farmers Co-operative Association has taken over the Farmers Shipping Association located at Sheldon.

The St. Anthony & Dakota Elevator Company has taken over the stock of the Robinson (Ryan, Iowa p. o.) Lumber & Grain Company.

Kimball Bros. Elevator Company, Council Bluffs, has been granted a permit for the remodeling of one of its buildings.

The Des Moines (Iowa) Grain Elevator Company has started alteration work on its elevator purchased some time ago.

The Light Lumber Company, Brooklyn, has bought the elevator there. W. S. Kearney, of Grinnell, had bid on the property.

The Farmers Grain Company of Story City, recently voted for the erection of a new grain elevator. The present elevator is over 40 years old.

The elevator of the Farmers Co-operative Company at Elk Horn which was destroyed by fire several weeks ago, will be rebuilt. Reconstruction will start shortly.

The Gund-Sien elevators at Lorah, Brayton and Exira, just recently purchased by E. L. Burnham, are being operated under the name of the Burnham Grain Company.

The Schuck elevator at Parkersburg, has been sold at public auction to a Mr. Froning of Garrison, for \$8,500. Mr. Froning also operates elevators at Allison and Dike.

The new 2,000,000-bushel storage plant of the Quaker Oats Company at Cedar Rapids, will be completed in June. With this addition, the company will have a total storage capacity at Cedar Rapids, of 9,250,000 bushels.

OHIO AND MICHIGAN

A. B. Caple will build a \$100,000 hay and grain plant at Toledo, Ohio.

L. W. Loy & Son of Brookville, Ohio, have increased their grain storage.

An oat huller has been added to the plant of A. L. Kolb at Wauseon, Ohio.

Fristos Grain Company has installed a corn grader in its elevator at Piqua, Ohio.

S. J. Rudy & Son have installed an oat huller in their elevator at Pleasant Hill, Ohio.

J. J. Lavery has bought the elevator at North Fairfield, Ohio. He will move it to Bucyrus.

The Sedalia (Ohio) Grain & Lumber Company has equipped its elevator with new elevating equipment.

A magnetic separator has been installed in the elevator of the Farmers Equity Exchange at Crestline, Ohio.

The Farmers Co-operative Elevator Company has bought the stock of the Shawton (McComb, Ohio, p. o.) Grain Company.

The Mark-Center (Ohio) Elevator Company has been recently organized with John W. Baluss as local manager.

The elevator of the Farmers Grain Company has been taken over by the Walhonding (Ohio) Elevator Company.

The Citizens Elevator Company of Vermontville, Mich., has improved its plant with a five-horsepower self-ventilated motor of General Electric

make. Several motor controls have been improved with automatic switches, providing low voltage and overload time limit protection.

August Schnelle and Walter Loy are the new owners of Lock Two Grain & Milling Company at Kettlersville, Ohio.

The grain elevator of the Eaton (Ohio) Equity Company has been leased to the Ohio Farm Bureau Service Corporation.

The Perrysburg (Ohio) Grain & Seed Company has improved its plant with a motor-driven combination wagon and truck dump.

Two combination wagon and truck dumps, motor-driven, have been added to the plant of the Oak Harbor (Ohio) Co-operative Company.

The Christian Breisch Company of Lansing, Mich., has bought the Curtis Elevator & Supply Company at Elsie. Earl Jones will continue as manager of the plant.

A new modern elevator will replace the Lykens elevator at Bucyrus, Ohio, which burned last August. H. D. Miller of the Zeigler Milling Company will operate the plant.

The Martin (Mich.) Farmers Co-operative Exchange has replaced the knife switch control on its five-horsepower motor with a General Electric Dust Tight Automatic Starter.

Contract for a 200,000-bushel grain elevator at Battle Creek, Mich., has been let by The Postum Company, Inc., to the James Stewart Corporation. It will be ready on July 1 to receive grain.

The electric power equipment, consisting of 17 motors, of the Albion (Mich.) Elevator Company has been overhauled, replacing a number of fused knife switches for controlling motors with automatic motor starters, having both low voltage and overload time limit protection.

WESTERN

Arthur Fletner has sold his elevator at Greybull, Wyo.

The Gano Grain Company will erect a large grain elevator at Pueblo, Col.

The Fulton (Pendleton, Ore., p. o.) Elevator is increasing its capacity to 150,000 bushels.

The Idaho Bean & Elevator Company has bought the David Johnson elevator at Basin, Wyo.

F. B. Moomaw is sole owner of the Moomaw Grain Company, Walsh, (Baca County) Col., having purchased the interest of the C. C. Isley Lumber Company.

Work has started on a 300,000-bushel terminal grain elevator at Denver, Col., for the O. M. Kellogg Grain Company.

The Farmers Grain Elevator Company at Athena, Ore., will increase its storage capacity to 300,000 bushels. It will be ready to receive the coming crop.

The Farmers Union Elevator Company will erect an elevator and warehouse at Wray, Col. Ground has already been broken.

The Ambler Grain & Milling Company, whose mill at Lamanda Park, Calif., was recently destroyed, has located at San Gabriel.

The grain elevator at Paoli, Col., owned by the Rehner Grain Company, has been sold to the Farmers Co-operative Company.

The Imperial Elevator Company will repair and overhaul its elevator at Frazer, Mont., before the movement of the coming crop.

A dust collecting system and other equipment have been installed in the plant of the Nampa (Idaho) Milling & Elevator Company.

Reconstruction of the burned grain elevator and warehouse of W. H. Lucke of Canby, Ore., will begin as soon as insurance is adjusted.

The Montana Central Elevator has completed its new elevator and plant at Valier, Mont. The new structure, which replaces the one burned a year ago, has a capacity of 42,000 bushels and is modern in every detail.

The new grain elevator for Tacoma, Wash., to be erected by the Pierce County port commission, will have a capacity of 450,000 bushels, and a warehouse capacity of 175,000 bushels. It will be of modern, fireproof construction.

The Colfax (Wash.) Iron Works has been awarded contract by the Vollmer-Clearwater Company of

Lewiston, Idaho, for converting 10 sack warehouses into bulk grain elevators, including the elevator at Fenn, Idaho, previously reported. The approximate cost is \$1,000 for each plant.

The Seattle Grain Company at Ralston, Wash., is improving its elevator with a 150-bushel hopper and Fairbanks Loading-out Scales. The warehouses will be repaired.

W. C. Cook is operating the elevator at Ft. Collins, Col., which he recently leased from the Longmont Farmers Mill & Elevator, as the Cook Grain & Flour Company.

The Equity Elevator & Trading Company of Pocatello, Idaho, plans to build a warehouse, 30 by 51 feet, to accommodate farm machinery which it will handle as a side line.

The Batsford Grain Company has been incorporated with a capital stock of \$25,000 to transact business in Great Falls, Mont. Directors are E. E. Batsford, J. E. Patten and B. H. Kjose, who are stockholders.

THE DAKOTAS

The Gladstone (N. D.) Equity Exchange has gone out of business.

Light crops have caused the Pacific Grain Company at Weecota, S. D. to close its elevator.

The Farmers Elevator Company at Rock Lake, N. D., has sold its elevator to T. C. Wildish.

The Buffalo Springs (N. D.) Grain Elevator has been purchased by T. H. Hagen of Minneapolis, Minn.

The Hettinger (N. D.) Equity Exchange has installed a new five unit cylinder grain separator at a cost of \$2,750.

Peter Knapp is now sole owner of the Tolna (N. D.) Grain Company, having bought the interest of A. M. Bergstrom.

The old Soo Line elevator at Washburn, N. D., which has not been in use for some four or five years, is being wrecked.

The Pembina County Farmers Union is considering the purchase of the mill and elevator of the Cavalier (N. D.) Milling Company.

The Blunt (S. D.) Grain Company is improving its plant with a five unit cylinder grain separator, also a 15-horsepower Fairbanks Morse Engine.

The Goedhart Grain Company of Minneapolis, Minn., and Sioux Falls, S. D. has taken over the Hoogestraat Grain Elevator located at Chancellor, S. D.

The Farmers Co-operative Elevator Company will start work soon on a new modern grain elevator at Overly, N. D., to be finished in time for the coming crop.

Von Seggern Bros. and F. C. Krotter of Gregory, S. D., have taken over the grain elevator and lumber yards formerly operated by Nye Jenks Grain Company.

The Equity Grain Elevator & Trading Company will erect a 50,000-bushel fireproof elevator at Hillsboro, N. D., to replace the one which recently burned.

SOUTHERN AND SOUTHWESTERN

W. L. Chalfant Grain Company will erect an elevator at Rankin, Okla.

R. F. McGinty has bought the grain business of Ralph DeWitt at Alvin, Texas.

The Marshall (Texas) Mill & Elevator Company will construct a \$100,000 addition to its plant.

The office of the Wheat Growers Elevator at Woodward, Okla., was recently robbed of \$200.

The Johnson Milling & Grain Company, El Paso, Texas, has been incorporated with a capital stock of \$75,000.

R. E. Roberts is building a 35,000-bushel grain elevator at Stratford, Texas, which will be completed early in June.

An elevator will be erected at Hitch, Okla. (on the state line between Texas and Oklahoma) by the Guymon (Okla.) Equity Exchange.

The Chickasha Mill & Elevator Company will erect a 10,000-bushel oats elevator and a feed manufacturing plant at Lawton, Okla.

J. J. Gibson has organized the Gibson Grain Company at Houston, Texas, to handle grain and feed.

April 15, 1929

Mr. Gibson has been connected with the J. E. Rogers Grain Company for the past two years and was formerly with the American Maid Flour Mills. The new company is capitalized at \$15,000.

The Parsons-Lewis Grain Company has been recently organized at Amarillo, Texas. Promoters are Harry E. Parsons and W. H. Lewis.

The Driftwood (Okla.) Co-operative Exchange has leased its elevator for the coming year to the Oklahoma Wheat Pool Elevator, Corporation.

Capitalized at \$75,000, the H. W. Armstrong & Sons Company of New Bern, N. C., has been incorporated to deal in grain, flour, sugar, etc.

The Texas City (Texas) Terminal Railway Company is installing a Stewart Dust Prevention System in its new elevator now nearing completion.

The Farmers Trading Company will build a grain elevator at Morrison, Okla. This will replace the old elevator which they bought several years ago.

A new office building is being constructed for the Perry Burrus Elevators at Dallas, Texas. It will also be occupied by the J. C. Crouch Grain Company.

The J. W. Bell Mill & Elevator Company has increased its elevator space with the erection of a new four-story addition to its plant at Spartanburg, S. C.

The foundation and filling are completed for the new warehouse of the Texas City (Texas) Terminal Elevator Company, and the steel construction of a new grain elevator is up.

Contract has been let to Jones-Hettelsater Construction Company for the erection of a 200,000-bushel grain elevator for the E. G. Ball Grain Company of Fort Worth, Texas.

The elevators of the Nashville (Tenn.) Warehouse & Elevator Corporation are being rebuilt and several additional buildings are also being erected, which will be completed in 90 days.

The Okemah (Okla.) Mill & Elevator Company is adding a two story addition to its plant. The building will be covered with steel sheeting. Machinery valued at \$4,000 will be installed.

An iron-clad elevator of 20,000-bushel capacity has been completed for the Carrier (Okla.) Mill & Elevator Company. It is equipped with the most modern machinery; also lightning protection.

The Wenderoth Grain Company of Fort Smith, will overhaul the Taylor grain elevator at Forum, Okla., which it recently bought. New machinery will be installed and it will be ready to receive the coming crop.

The Littlefield (Texas) Coal & Grain Company has been chartered with a capital stock of \$20,000. Incorporators are W. K. Dickinson, Sr., B. C. Dickinson and H. W. Snowden. It will do a general grain business.

Work has started on a 100,000-bushel shipping elevator for the Texhoma (Okla.) Elevator Company. The structure will be of the most modern type and built of reinforced concrete. It will be ready in time for the new crop.

Plans have been ordered and Helena, Ark., is now assured of the grain transfer depot, previously reported as authorized by the War Department. This structure will be used for the transfer of grain to barges from railroad cars.

The Interstate Milling Company of Charlotte, N. C. plans to rebuild its storage tanks, making them of concrete. One of the 10,000-bushel tile tanks recently broke, letting out practically all the grain. Additional tanks are also contemplated.

ILLINOIS

A building to be used for machinery and other wares will be erected by the Monica (Ill.) Elevator Company.

One of the elevators of the Farmers Grain Company of Buckley, will be dismantled and sold to the highest bidder.

The Big Rock (Ill.) Farmers Co-operative Company is transacting business in a temporary office since its recent fire.

J. W. Stills & Son are operating the elevator at Grayville, formerly owned by R. S. Prunty & Co. who have gone out of business.

The Big Four Elevator Company will erect a brick and concrete warehouse, 40 by 60 feet, at Mattoon. The new addition will cost \$6,000.

The Heaton Station (Hoopeston, Ill., p. o.) Grain Company has been incorporated with a capital stock of \$12,000, to deal in grain, seeds, lumber, etc. Incorporators are J. B. Ritter, Laurence Norton and O. M. Ross.

The B. & B. Farmers Co-operative Elevator Company of Boody, will rebuild its 30,000-bushel elevator, which is of wood construction. A feed house addition will also be built. Two elevator legs and 11 grain bins are also included in the building project.

The partnership of Kellogg & Powers, who have conducted a grain and feed business at Cambridge for seven years, has been dissolved. Walter Powers,

junior member of the firm, will continue to operate the business, and Harry Kellogg will devote his time to other interests.

The Farmers Co-operative Elevator Company at Dwight voted recently to lease its properties for a term of five years to the Federal Grain Company, Inc., of Chicago, Ill. Mr. Gilchrist of McComb, in the employ of the Federal company, will take charge.

The Bowen (Ill.) Feed & Milling Company sold its elevator and feed store at public auction to John E. Wilson, who paid \$7,000 for the building and equipment. The sale was held to dissolve the partnership composed of C. R. Lewis, R. C. Harrison and John E. Wilson.

MISSOURI, KANSAS AND NEBRASKA

The Mitchell (Neb.) Elevator Company is adding a store room to its plant.

The Sanford (Kan.) Grain & Supply Company plans the building of a fireproof office.

The T. B. Hord Grain Company has installed a manlift in its elevator at Grand Island, Neb.

The Aurora (Neb.) Elevator Company is improving its equipment with a new conveyor.

The Schouler-Bishop Company will rebuild its elevator at Webber, Kan., which recently burned.

The equipment of the Hynes Elevator Company at Cheney, Neb., has been improved with a chain drive.

The Farmers Co-operative Elevator Company will install a new grain cleaner in its plant at Plattsmouth, Neb.

Three elevators of the John F. Westrand Company, Laurel, Neb., were recently sold to the Holmquist Company.

Electric motors and a drive will shortly be installed in the plant of the Farmers Elevator Company at Lisco, Neb.

A new ball bearing distributor has been added to the plant of the Farmers Grain & Stock Company at Eagle, Neb.

The Farmers Elevator at Smithfield, Neb., which burned a year ago, is being wrecked. The tile will be salvaged and sold.

Two elevators, one at Polk and one at Arnold, have been purchased by the Lexington (Neb.) Mill & Elevator Company.

The Crete Mills, Merna, Neb., lost 7,000 bushels of wheat recently when supporting bolts snapped in two bins of its elevator.

Permit has been granted to the Omaha (Neb.) Flour Mills to erect a 525,000-bushel elevator at an approximate cost of \$250,000.

The Schultz Gruis Grain Company has installed an improved ball bearing distributor in its new elevator being built at Hastings, Neb.

The elevator plant and property of the Seward Grain Company, Richmond, Mo., was sold at public auction to J. S. Hughes & Co., mortgagee.

The Walrath Sherwood Lumber Company has purchased the Nye Jenks elevator at Leigh, Neb. John Gloudt and J. Kibler will manage it.

Considerable grain and about 30 tons of coal disappeared from the plant of the Atlas Grain Elevator at Jackson, Neb., following its recent fire.

The Malden (Mo.) Grain Company is improving the Dees-Garner elevator, which it bought some time ago. Belts are replacing chains in the two legs.

J. M. Redd will overhaul and reopen his elevator at Hardin, Mo. A court recently awarded this elevator to him in his suit against the Seward Grain Company.

The Farmers Co-operative Grain Association, Polk, Neb., has been incorporated with a capital stock of \$25,000. Promoters are P. T. Wurtz, A. Benson and C. Strand.

The new fireproof elevator of the Illinois Central Railroad at Omaha, Neb., is now taking in grain. A Link Belt Car Unloader has been installed to expedite the unloading of cars.

The Farmers Supply & Exchange at Independence, Kan., has been taken over by Samuel Etter, farmer and stockman. He will be assisted in its management by his son, W. F. Etter.

A modern marine leg will be added to the elevator of the Ralston Purina Company at St. Louis, Mo. This will be completed in two months and will facilitate the handling of grain from small barges to the large barges which carry grain to the Gulf.

The Kansas Co-operative Wheat Marketing Association announces the formation of a subsidiary organization, capitalized at \$500,000, to acquire and build country elevators. Headquarters will be in Wichita. Terminal elevators will ultimately be acquired.

The Farmers Co-operative Grain & Mercantile Company has recently purchased the City Elevator from the Halstead (Kan.) Milling & Elevator Company. The new owners will handle coarse grains only from this elevator, and the Farmers elevator

will handle only wheat. Henry Buller will continue in charge of the City Elevator, and Emil Rauckman in charge of the Farmers Elevator.

The J. M. Uridil Grain Company's elevator at Nimberg, two miles north of Abie, Neb., has been closed. J. M. Uridil who has operated the plant for several years expects to make all accounts good.

Additional trackage costing \$100,000 will be put in by the Wichita (Kan.) Terminal Railway to expedite the handling of the coming wheat crop. The Red Star Milling Company and the Wichita Flour Mills Company will have additional space for grain cars.

George Gano plans the erection of a 60,000-bushel elevator at Garden City, Kan. Construction will start as soon as the Santa Fe completes a spur track to the elevator site. The house will be equipped with modern improved machinery and will have two elevator legs. It will be ready in time for the 1929 wheat crop.

The Anan (Glenvil, Neb. p. o.) Co-operative Grain Company, Inc., has succeeded the Farmers Grain, Coal & Livestock Association which has been dissolved. Officers of the new company are: President, W. C. Osler; secretary, Henry F. Davis; treasurer, August Stalenke; directors: Bert Valentine, John P. Henrichs and John Kalemán.

The Union Terminal Railway Company of St. Joseph, Mo., will issue first mortgage bonds in the amount of \$650,000 which it will sell to the Missouri Pacific Railway. With the proceeds of these bonds the company will buy and improve the grain elevator of the St. Joseph Public Elevator Company. The capacity of the elevator will be increased to 2,250,000 bushels.

INDIANA

The Home Grain Company of La Grange has increased its capital stock to \$32,000.

Wolfram Grain Company has installed lightning rods on its elevator at Brownsburg.

An addition is being built to the plant of the Worthington (Ind.) Grain Company.

Glenger & Co. has equipped its elevator at Jeffersonville with lightning protection.

Lightning rods have been installed on the elevator of McDonald & Co. of New Albany.

Francis Garrison has leased the elevator and plant of the Central Grain Company at Urbana.

A. B. Martin & Co. has recently installed a corn cutter and grader in its elevator at Sweetser.

The Geneva Milling & Grain Company has covered its elevator at Bryant with galvanized iron.

The Farmers Co-operative Elevator Company has equipped its elevator at Centerville with fireproof motor rooms.

Goodrich Bros. Company of Winchester has bought the Onward (Ind.) Grain Elevator which will be managed by Lee Huffman.

N. A. Wall has improved his elevator at Pittsboro with two electric motors, one a 30-horsepower for handling elevator equipment, and one 50-horsepower to drive a new feed grinder.

Goodrich Bros. Company, Inc., of Winchester, is operating the elevator at Converse which it recently purchased. Glen Martin, formerly salesman for the Goodrich company, is manager.

The partnership of the H. E. Kinney Grain Company at Indianapolis, has been dissolved and a corporation formed, bearing the same name. The partnership was comprised of Clarence D. Cutsinger, Homer I. Cutsinger and Warren K. Mannon.

The grain elevator of the Farmers Co-operative Company at Gilman (Alexandria p. o.) has been purchased by the Goodrich interests who will remodel and operate it on a larger scale. The elevator and ground brought \$1,100 and the equipment \$261 at auction sale.

To make room for a national memorial on Fort Sackville at Vincennes, the old grain elevator of Paul Kuhn & Company was recently destroyed. Fire was set to the elevator when the dynamite explosion failed, and the structure fell into the river.

MINNESOTA AND WISCONSIN

S. A. Kuhlman is operating the elevator at Byron, Minn., which he recently bought from T. O. Distad.

Raymond Heit and August Bauer have bought the grain and coal business of Fugina & Fertig at Arcadia, Wis.

Robbers broke into the offices of the Cargill Elevator Company, Minneapolis, Minn., and took \$200 in money and \$200 in stamps.

The New Richmond Roller Mills is operating the elevator at Colfax, Wis., which it recently purchased from the Northern Elevator Company.

Bids have been received by the Farmers Co-operative Grain Company for the disposal of the Hanson-Barzen elevator structure at St. Hilarie, Minn.

Contract has been let to James Stewart Cor-

poration for the erection of a 1,000,000-bushel elevator at Minneapolis, Minn., for Spencer Kellogg & Sons, Inc.

A 1,800,000-bushel grain elevator will be erected at Minneapolis, Minn., by Washburn Crosby Company. Estimated cost of the new structure is \$500,000.

The New Richmond Roller Mill Company has bought the plant of the Northern Elevator Company at Chippewa Falls, Wis. Joseph Freestone, former manager of the elevator, is retiring because of ill health.

The Haertel Company, Inc., Minneapolis, Minn., has taken over the elevator at Farmington formerly operated by E. E. Beckley Company. C. G. Chase will be local manager of the new firm which will handle grain, flour and feeds.

The plant of the Farmers Co-operative Company at Balaton, Minn., is undergoing complete repairs, and as soon as it is in condition will be offered for sale at public auction by Quinn-Benson Grain Commission Company who took it over in payment of indebtedness.

The grain elevator at Green Bay, Wis., formerly owned by Emil Hauterbrook, has been bought by C. W. Hendrie of that city and P. C. Lyman, of Milwaukee. The new firm will be known as the Green Bay Elevator Company and will handle grain, flour and feeds.

Work has started on the construction of a 600,000-bushel storage elevator at Hastings, Minn., for

the King Midas Mill Company. The elevator will contain 33 tanks and will be completed in time for the new crop. The site is one of the oldest in Minnesota, dating back more than 75 years.

CANADA

The Toronto Elevators, Ltd., is building an addition to its rail shed at a cost of \$25,000.

The Midland-Pacific Grain Company will construct this fall a 1,000,000-bushel addition to its elevator on the north shore of Burard Inlet, Vancouver.

Buckerfields, Ltd., elevator owners and grain merchants of Vancouver, B. C., are floating \$250,000 worth 6 per cent first mortgage bonds to mature in 1949.

The Canadian government will spend \$3,700,000 for dredging, dock building and constructing a 5,400,000-bushel elevator on the water front at Prescott, Ont.

The Ontario legislature has approved a bill whereby the city of Sarnia will advance \$400,000 towards the cost of an additional 2,000,000-bushel unit to its elevator at that point, as previously reported.

A 4,000,000-bushel grain elevator is proposed for Kingston, Ont., to take care of the trade that will come following the opening of the Welland Canal in 1930. The president of the Canada Steamship Lines has indicated his willingness to assume responsibility for the erection of the building if the city provides the site and will take care of the dredging.

Mercantile & Elevator Company at Gilman City, Mo., died following a week's illness, at the age of 58. His widow, three children and a brother survive him.

GORTON.—Edward F. Gorton, member of the Chicago Board of Trade for a number of years, died recently while on a Mediterranean trip.

GREGORY.—William Daniel Gregory, prominent in the grain and milling world of the Northwest for almost 50 years, and president of Gregory, Jennison & Co., Minneapolis, Minn., died on board steamship while on a world tour. He was also associated with the Powers Elevator Company and the Sheffield grain elevator and milling enterprises. His widow and a son survive him.

HADDEN.—G. W. Hadden, pioneer grain dealer of Penfield, Ill., died March 8. He was 77 years old.

HEWER.—William Hewer, aged 85, veteran member of the New York Produce Exchange, died in Brooklyn.

HOAG.—Frank B. Hoag, owner of the Frank B. Hoag Grain Company died suddenly at his home in Watertown, Wis. He was 47 years old.

OBITUARY

ARNDT.—Edward Arndt, owner and operator of the grain elevator at La Crosse, Ind., died in Chicago. He also owned an interest in an elevator at Hamlet. Of his immediate relatives, his widow and three children survive him.

BAUMANN.—Carl H. Baumann of the C. H. Baumann Grain Company, Milwaukee, Wis., died recently. Mr. Baumann was 51 years old. He was a member of the Milwaukee Chamber of Commerce. His widow and a daughter survive him.

BERGLUND.—Arthur W. Berglund, secretary of the Archer-Daniels Midland Company, died of pneumonia at his home in Minneapolis. Mr. Berglund came to Minneapolis when a boy and started in as a clerk for the Midland Linseed Products Company. He was 50 years old. His widow and two children survive him.

BROMMER.—Eise Brommer, formerly manager of the Farmers Elevator at Midland, Iowa (Rock Rapids p. o.) died at his home in Chicago. He was buried in Midland.

CROCKER.—Samuel G. Crocker, veteran chamber of commerce member, and formerly with Hughes & Crocker, flour and grain commission, died at his home in Baltimore, Md., on March 29. Mr. Crocker was 86 years old. He had been ill for some time following a series of accidents.

DOUGHERTY.—W. F. Dougherty, pioneer elevator operator at Glenwood, Minn., died while attending a lodge meeting. Mr. Dougherty opened an elevator in Glenwood in 1882 which he operated until 1892, when he went into the banking business. Six children survive him.

DOWLIN.—Guy Dowlin, formerly manager of the Western Terminal Elevator at Burbank, S. D., died recently.

FAHEY.—J. Carroll Fahey, aged 39 years, died March 24 in Baltimore, Md., following an acute illness. Mr. Fahey was an associate member of the New York Produce Exchange and president of the Maryland Grain Company. His widow and two children survive him.

HOWE.—Charles Howe, manager of the Farmers Elevator at Harvard, Neb., died recently in a hospital in Hastings.

JENNINGS.—J. B. Jennings, pioneer grain dealer in western Kansas and Board of Trade member, died at his home in Jennings, Kan.

JOSEPH.—Daniel Joseph, president of the Dan Joseph Company of Columbus, Ga., died following a short illness. He was a flour and grain broker for more than 30 years.

KAUFMAN.—H. Kaufman, president of the Stevens-Scott Grain Company of Wichita, Kan., and well known grain dealer, miller and rancher in southern Kansas, died at the age of 68 years, following a stroke of paralysis.

KUCK.—Edward J. Kuck was smothered to death when he fell into a grain bin of the Western Elevator Company at Appleton, Wis. The bin was being filled with corn. Mr. Kuck was one of the owners of the company.

GOODING.—Abraham O. Gooding of the Farmers

HOLMAN.—Alvin D. Holman, grain broker and member of the New York Produce Exchange, died at his home in Englewood, N. J. He was 72 years old.

LAPHAM.—Byron Lapham, aged 81 years, pioneer elevator and mill owner of Glens Falls, N. Y., died. He was formerly associated with Lapham & Parks, now H. B. and H. M. Parks.

MCINTYRE.—Charles McIntyre, grain dealer of Renfrow, Okla., died of heart disease while visiting in Colorado.

MONTGOMERY.—James Montgomery, early resident and elevator operator at Wilmont, Minn., died at his home in Minneapolis. Mr. Montgomery with Charles Root as partner opened the first elevator and implement business in Wilmont.

MORTON.—James F. Morton, well known corn broker, died of pneumonia on April 4 at Henrotin hospital, Chicago. He had been ill one week.

NORTHROP.—C. Jay Northrup, member of the Chicago Board of Trade since 1888, died suddenly on April 6 of heart disease. Mr. Northrup was formerly with Armour & Co., Culver & Co., and Hulburd, Warren & Chandler. His daughter and a sister survive him.

PAUL.—Joseph Paul, superintendent of Northwestern Elevator & Mill Company for 49 years, died at his home in Toledo, Ohio, on March 27. He was 79 years old. Mr. Paul retired nine months ago because of ill health. His widow and two children survive him.

PRESCOTT.—William F. Prescott, owner and operator of elevators at Leslie and Mason, Mich., died. He had been in the grain business at these points for over 30 years.

ROOKER.—W. M. Rooker, manager of the Farmers Elevator at Veedersburg, Ind., died following a surgical operation. Mr. Rooker was 50 years old. His widow and two children survive him.

SCHMITT.—J. R. Schmitt, grain broker and well known to the grain trade of the Southwest, died in Kansas City of a heart attack. He was 47 years old. Mr. Schmitt entered the grain business with S. R. Washer Grain Company 25 years ago at Atchison, Kan. Later he operated in St. Joseph, St. Louis and later in Kansas City. His widow and two children survive him.

SIMS.—John Sims, retired grain merchant and elevator operator, died of cerebral hemorrhage at his home in Frankfort, Ind. Mr. Sims was 70 years old. He was interested in elevators in Indiana at Forest, Stockwell, Wingate, Fowler, Frankfort, Royal Center, Circleville, and in Illinois at Oakland. His widow and five children survive him.

STEINER.—D. W. Steiner, manager of the Huntstown (Ind.) Grain & Lumber Company, died of a heart attack.

UPTON.—Robert J. Upton, president of the Upton Mill & Elevator Company, Minneapolis, Minn., died at the age of 61 years. His widow, three brothers and one sister survive him.

WELDY.—Aaron Weldy, aged 38, formerly part owner of the Farmers Coal & Feed Company of Goshen, Ind., committed suicide. His widow and two children survive him.

FIRE-CASUALTIES

Fountain, Mich.—Fire destroyed the elevator of B. F. Brunke & Ryon Grain Company.

Dundee, N. Y.—Fire recently destroyed the plant of the Dundee Co-operative G. L. F. Service, Inc.

Palms, Mich.—A severe windstorm totally destroyed the hay warehouse of Paul Billings & Co.

Hebron, N. D.—The Gold Mill & Elevator was destroyed by fire March 28, causing a loss of \$30,000.

Monroe, Mich.—Fire recently destroyed the elevator of Burt McKenzie & Son. Estimated loss is \$35,000.

Newdale, Manitoba.—Fire destroyed the elevator containing 35,000 bushels of grain, of the A. Forsythe Company.

Bottineau, N. D.—Arthur Pollman fell from an elevator scaffold, injuring his chest and fracturing his collar bone.

Comstock, Minn.—The elevator and feed mill of J. W. Comer & Son were damaged by a recent fire. Loss is estimated at \$25,000.

Council Bluffs, Iowa.—Fire damaged the elevator and warehouse of the American Chemical Company to the extent of \$10,000.

Waterman, Ill.—Fire recently destroyed the F. H. Withey Grain Elevator. The loss is estimated at \$22,000, one-third of which is covered by insurance. The fire started in the feed grinding room, and it is

believed that the grinder which had been operating most of the day became overheated.

Leith, N. D.—A derailed box car in running amuck tore a corner off the Bagley elevator and completely demolished its coal sheds.

Homer, Ill.—The elevator of William Dennis, grain and coal dealer was destroyed by fire. Sparks from burning straw started the blaze.

Marshfield, Wis.—Warehouse No. 2 of the Farmers Co-operative Produce Company was recently damaged by fire, causing a loss of \$6,000.

Venedocia, Ohio.—Fire completely destroyed the elevator of the Pollock Grain Company. Grant Pollock, owner, estimates the loss at \$12,500.

Callaway, Neb.—Fire completely destroyed the elevator and mills of the Callaway (Neb.) Milling & Electric Company, causing a loss of \$40,000.

Mooreton, N. D.—Philip Lenz fell a distance of 40 feet while working in the top of the lift in the Farmers Elevator. He escaped with minor injuries.

Roodhouse, Ill.—A. Fry, manager of the V. C. Elmore Elevator, caught his sleeve in the machinery recently, causing several broken ribs and severe bruises.

Otis, Kan.—Fire completely destroyed the grain elevator of Fritz Kerbs, causing a loss of \$18,000. About 1,500 bushels of wheat and a part of a car of wheat standing on track were destroyed. The

elevator was of frame and ironclad construction. Insurance covered the greater part of the loss. A shorted electric wire is thought to have caused the fire.

Canby, Ore.—Fire completely destroyed the grain elevator and warehouse of W. H. Lucke. The explosion of a gasoline tank is thought to have caused the blaze.

Ottosen, Iowa.—Andrew Lovig, assistant at the Farmers Elevator is recovering from an injury received the first of the year when a pump fell on his legs and paralyzed them.

Alden, Kan.—Walter Swensen had two of his fingers badly smashed while cleaning the feed mixer in the plant of the Farmers Co-operative Grain, Mill & Mercantile Association.

St. Joseph, Mo.—Fire damaged the elevator of the Union Terminal Railway Company to the extent of several hundred dollars. Sparks from a hoisting engine, used for construction work at the elevator, set fire to burlap wrapping on a conveyor belt.

Toledo, Ohio.—An overheated dryer ignited grain in the elevator of the Cloverleaf Elevator Company, causing a loss of \$4,000. The principal damage was the loss of grain. One of the firemen was slightly injured when he tore open the grain chutes in an effort to reach the burning corn.

Bicknell, Ind.—The hay barn and warehouse of

the O. L. Barr Grain Company was destroyed in a recent fire. The building, which formerly belonged to the old Bicknell mine, was purchased recently by Mr. Barr who used it for the overflow from his elevator. Hay and straw valued at \$1,000 were stored in the main building, and farm implements in the adjoining structure. The loss is estimated at several thousand dollars.

Bloomington, Ill.—The elevator of the Funk Seed Company was destroyed in a recent fire. Loss is estimated at \$100,000. The elevator was new, having been completed last fall at a cost of \$30,000. Soy beans, valued at \$70,000, were stored in the elevator. Rebuilding operations will begin at once.

Graham, Texas.—The plant of the Graham Mill & Elevator Company was severely damaged by fire on April 3. The fire started on the third floor in the fan of the cleaning machine. The heaviest loss was to machinery which will be replaced immediately. The loss was covered to a large extent by insurance.

Swayzee, Ind.—Fire destroyed the elevator of the Swayzee Elevator Company, causing a loss of about \$10,000, covered by \$6,000 insurance. The owners, Walter Lavengood of Swayzee, and J. D. Keiser of Elwood, had recently moved the elevator from Rich Station to Swayzee, and repairs and additions had not yet been completed, although some machinery had been installed. No grain was in the elevator.

HAY, STRAW AND FEED

Earl Griffin has opened a feed store in Lake City, Ark.

E. L. Ray & Co. has opened a feed store at Martin, Tenn.

T. H. McLemore has opened a feed store at Elk City, Okla.

A. S. Hopper has opened a new feed store at Bentonville, Ark.

The Farm Bureau Feed Store has opened for business at Milton, Ind.

The L. & G. Feed Company has established a business at Rockford, Ill.

A feed store has been opened at Carrizo Springs, Texas, by Otto A. Gardner.

An addition has been built to the feed plant of Paulson & Son at Alta, Iowa.

The Farmers Elevator is installing a feed grinder in its plant at Arlington, S. D.

H. D. Frick has installed a corn cutter and sheller in his elevator at Wawaka, Ind.

The Yale (Mich.) Elevator Company has installed a feed mixer in its plant.

Fred Route has installed a belt driven feed mixer in his plant at Amery, Wis.

The Co-operative Elevator at Orange City, Iowa, has installed a new feed mixer.

Penman Bros. have installed a vertical feed mixer in their plant at Brazil, Ind.

Missel Bros. of Wheatland, Iowa, have added a corn cracker to their equipment.

The Raber (Columbia City p. o. Ind.) Co-operative Company has added a feed grinder to its equipment.

The Landman Elevator at Coldwater, Ohio, has added a feed grinder to its equipment.

A feed grinding and mixing plant will be built at Lewisburg, Pa., by W. J. Follmer.

The Coldwater (Mich.) Co-operative Company has bought the feed store stock of G. S. Cox.

The Froning Grain & Coal Company has taken over the stock of the Allison (Iowa) Feed Mill.

The Mid-West Feed Company has opened in Des Moines, Iowa. It will handle grain and feeds.

The Norway (Iowa) Grain Company plans the erection of a warehouse for feed, seed and coal.

S. B. Swope has installed a belt driven feed mixer in his plant at Canal Winchester, Ohio.

The O. K. Feed Store has moved to its new location in Ardmore, Okla. Jack Walton is manager.

The Mangelsdorf Seed Company is now operating on full time its soy bean mill at Atchison, Kan.

The Ralston Purina Company is erecting a new office building and warehouse at Woodstock, Ont.

The Farmers Elevator Company has added to its plant at Arlington, S. D., a 26-inch feed grinder.

The Farmers Union Co-operative Association has installed a feed mixer in its plant at Ashland, Neb.

The Pioneer Elevator & Lumber Company has installed a feed mixer in its elevator at Hopkins, Minn.

A. L. Larson & Son have installed a feed grinder

in their plant at Pilot Point, Texas. It is run by electric motor and will grind 1,500 pounds of corn in an hour.

J. E. Hale of Collins, Iowa, has installed a No. 1 Haines Feed Mixer of 40 bushels' capacity and with belt drive.

A feed mixer of 100-bushel capacity has been installed in the elevator of Nolte & Haveman, Oshkosh, Wis.

The C. B. Merris Feed Store at Canon City, Col., has been bought by Albert Neal, a rancher of Springfield.

A feed, lumber, and fuel business has been opened at Elkhorn, Wis., by J. H. Harris, Bruce Harris and B. B. Kraus.

George Nichol has sold his business and become a partner in the feed business of Glen Erdmeier at Shannon, Ill.

The McMillen Company of Fort Wayne, Ind., has increased its capital stock from \$280,000 to over \$1,000,000.

A feed mixer, driven by electric motor, has been installed in the plant of Yoder & Co., West Liberty, Ohio.

The Tulsa (Okla.) Feed Company has moved into its new quarters. R. A. Hayden and Sherman Durrett are owners.

A feed grinder and two 25-horsepower motors have been installed in the elevator of I. E. Oustad at Badger, S. D.

A feed mixing plant of 40 tons' capacity is being installed by the North Iowa Wholesale Company of Emmetsburg, Iowa.

The Quality Feed & Seed Company has opened a new business in Washington, Iowa. B. Whitlock and P. Lytle are proprietors.

The American Milling Company has opened a store at Rockford, Ill., for the sale of poultry feeds. B. Yennick is in charge.

The Archer-Daniels Midland Company of Minneapolis, Minn., has completed a basement under one of its warehouses.

The Terminal Grain & Feeds Handling Company is installing feed mixing machinery in its plant at Slaton, Texas.

The interest of Ted Peters in the firm of Manlove & Peters, feed dealers at Gustine, Calif., has been purchased by R. F. Kerr.

The S. F. Walstad Independent Elevator at Sacred Heart, Minn., has improved its plant and installed a new 27-inch feed grinder.

Properties of the Andrews & Son Feed Store, Woodland, Wash., have been strengthened with additional foundation timbers.

George Helm has installed in his plant at Stockton, Mo., a No. 1 Haines Feed Mixer with belt drive. It has a capacity of 40 bushels.

The new \$500,000 mixing plant of the Ralston Purina Company, now being built at Denver, Col., will be completed October 1.

France Bros. Feed Company of Buckley, Wash., and the Gateway Feed Company and Murphy Feed

Company, of Enumclaw, have formed the Mutual Egg & Poultry Market to increase production of poultry and poultry products.

The Farmers Elevator Company has installed a feed grinder with a 26 horsepower motor in its elevator at Beaver Creek, Minn.

A feed and produce store has been opened at Wayne, Neb., by A. D. Aden, formerly engaged in the milling business in Lincoln.

A feed mixer with a capacity of 50 bushels has been installed in the plant of the Baxter Mill & Elevator Company at Vinta, Okla.

Elmer Forney has purchased the Trumbull Coal, Feed & Supply Company at Niles, Ohio. He will specialize in dairy and poultry feeds.

The Missoula (Mont.) Feed & Grain Company has completed a milling plant that will turn out several thousand tons of dairy and poultry feed.

S. M. Thornton has converted his flour mill at Laurel, Mont., into a feed grinding plant. He will do custom grinding and sell feed products.

The Shelby (Mich.) New Era Co-operative Association, has recently installed a feed grinder with 20-horsepower General Electric Motor.

Moyer & Son, dealers in coal and feed at Souderston, Pa., will erect a warehouse, 42 by 160 feet. They are also rebuilding their shed and bins.

The Selby (S. D.) Equity Exchange has improved its elevator with a 24-inch feed grinder and two 25-horsepower electric motors.

The Andres & Wilton Farmers Grain & Supply Company, Peotone, Ill., is wiring its elevator for electric power and installing a feed grinder.

The Pan-American Feed Company of Kansas City, Mo., plans to install new machinery and increase its capitalization from \$200,000 to \$600,000.

A combined corn cutter and feeder has been added to the equipment of the Farmers Co-operative Company's elevator at Seymour, Ind.

C. Kornegay has installed in his plant at Winters, Texas, two feed grinding machines. Corn, cane and sorghums will be ground into feeds.

The De Smet (S. D.) Grain Company has installed a feed grinder and two 25-horsepower motors.

Since April 1 J. W. Schultz, the new owner, has been operating the Linter feed business at Northwood, Iowa. He plans considerable expansion.

O. H. Seiple of Bellingham, Wash., has added to his chain of grain and feed stores the Monte Cristo Feed Company of Everett, Wash., which he recently bought.

The Edinburg (Ill.) Farmers Grain Company is improving its equipment with a new feed grinder, driven by 30-horsepower fully enclosed fan ventilated motor.

George McGaa has installed a feed grinder in his plant at Scenic, S. D., for the manufacture of alfalfa meal. The grinder has an hourly capacity of 3,000 to 4,000 pounds.

The Cash Feed & Grocery Company has been incorporated with a capital of \$10,000 to operate at Kissimmee, Fla. Incorporators are L. R. Squires and R. E. Lucius.

The plant of the T. B. Hord Alfalfa Meal Company at Central City, Neb., has been improved with a new clutch, sprockets, pulleys and a steel smokestack for the power plant.

The Albion (Mich.) Elevator Company has installed a magnetic spout ahead of its feed grinder to remove tramp iron from stock to be ground. A small motor furnishes direct current.

The Bourbon Coal & Feed Company has opened at Paris, Ky., with a stock of feeds, grain and seeds. The firm consists of M. T. McElDowney, J. T. Bowser, W. R. Knight and O. W. McCormick.

The Riley Feed Manufacturing Company is building a modern feed plant in conjunction with its new elevator now being erected at Pine Bluff, Ark. Special feed equipment will be installed.

M. A. de Werd of Cottonwood, Minn., formerly in the grain business at Morton, Minn., has bought the feed mill business of Henry Leonard at Olivia, Minn. Mr. Leonard will continue at the mill.

The feed milling and grain cleaning establishment at Colfax, Wis., formerly owned by George Ripley, has been purchased by C. W. McFarland, manager of the Colfax Grain & Feed Company.

After carrying on a successful feed business for 50 years, D. P. Reid & Bro., Inc., of Norfolk, Va., are retiring and leasing their main warehouse to S. D. Scott & Co., who operate several branches.

The Provemont Co-operative Association of Lake Leelanau, Mich., has added to its equipment a Fairbanks-Morse Feed Grinder which will be operated by converted automobile engine. A magnetic spout has been attached for tramp iron.

The Rockafellow Grain Company has built an addition to its east elevator for its feed mill at Carson City, Mich. It has discontinued the west elevator, making the plant in one location. Six fully enclosed

self-ventilated ball bearing motors with automatic starters, providing low voltage and overload time limit relay protection, have been installed.

The Monroe Mills and the Curry Coal Company at Bloomington, Ind., recently purchased by Lyle Fowler, will be operated under the name of the Curry Coal & Supply Company. Feeds, seeds, coal and building material will be handled.

Chatterton & Son of Pompeii, Mich., are adding to their equipment a 7½-horsepower motor to operate a feed mixer. The motor is enclosed in a fire resistive enclosure of asbestos, lumber and concrete. Other motors in the plant are fully enclosed and self ventilated.

The Elsie (Mich.) Elevator Company is remodel-

ing its feed grinding equipment and installing a 22-inch Sprout Waldron Double Attrition Mill, with two 20-horsepower motors direct connected. A magnetic spout protects it against tramp iron. A 25-horsepower motor in fire resistive enclosure is being installed for remaining equipment.

A 24-inch feed grinder with a 30-horsepower fully enclosed pipe ventilated motor has replaced a belt driven grinder in the plant of the Shepherd (Mich.) Elevator Company. The remainder of the plant will be operated by a 10-horsepower fully enclosed self-ventilated ball bearing motor, controlled by a dust tight automatic switch. A magnetic spout will be placed ahead of the feed grinder to remove tramp iron from the stock to be ground.

in. Hence holders of the meager spot supply are very firm, quoting 35 at 36 cents, against 34 cents a month ago.

Red Clover (domestic) which had acted in a very disappointing way, assumed its regular place as the spring leader. In spite of reduced stocks the quotation remained at 33½ cents. Imported clover continued to move very slowly, being about the most uninteresting item on the list. In spite of larger arrivals, last month's nominal basis of 22½ cents duty-paid was maintained. Total arrivals for the month were about 5,750 bags, compared with about 3,765 during the preceding month.

White Clover was active and a somewhat acute shortage of supplies developed. Consequently some holders advanced the basis from 28 cents to 32 cents. Subsequently the lower basis was reestablished as the advance checked buying. Buyers held off because of expectations of more liberal offers following the arrival of seed bought months ago for April delivery. Arrivals for the month were about 415 bags, compared with about 135 for the previous month.

All grass seed varieties joined in the general activity in domestic business, but little or nothing was done for export. In spite of further depletion of stocks, prices were not advanced from last month's seven cents for Timothy; 30 cents for 21 pound Kentucky Blue grass; and 29 cents for 19 pound Bluegrass. Fancy Redtop is ½ cent lower at 15 cents.

Imported English ryegrass remained unchanged at 9½ cents, duty-paid, as the good demand readily absorbed the larger arrivals, amounting to about 570 bags, compared with about 370 during the preceding month.

SOYS TESTED AT PURDUE

Very few samples of soybeans are testing more than 90 per cent in germination this year, and quite a few are germinating less than 75 per cent, tests made at Purdue, Indiana, show. When the germination is below 90 per cent, they had better be seeded at a higher rate than usual.

Those who test their own seed are advised to grow the seed more than a week, as frequently it will germinate but does not have the vigor to continue growth. More than 1,000 acres of popular varieties of soybeans have been certified by the Indiana Corn Growers Association this past year as sources of pure seed.

OFFICIAL DATA ON VITALITY OF BURIED SEEDS

E. Brown, botanist in charge of the Federal Plant Industry Bureau's seed testing laboratory, Washington, D. C., writes the AMERICAN ELEVATOR AND GRAIN TRADE, referring to a paragraph in the February issue (Page 506) on "Buried Seed Vital Eight Years." In that connection, Mr. Brown submits material prepared by W. L. Goss, of the bureau staff, dealing with Government experiments on the vitality of buried seeds.

The oldest seed which ever grew and was officially reported, it seems, was over a hundred years old. It was not a grain plant seed, and its record in detail is to be found in the 1908 volume, "Proceedings of the Royal Society of Victoria," prepared by Messrs. Ewart and White.

DR. DUVEL TESTS SEED "FUTURES"

In 1902, Dr. J. W. T. Duvel, then of Department of Agriculture seed laboratory, without any grain futures administration worries, took up an idea developed in Michigan over 30 years before, and began to test the vitality of buried seeds on a large scale.

For the experiment Duvel used 112 samples of seed, representing 107 species. A fixed number of each kind of seed was mixed with sterilized soil taken from the pit where the seeds were to be buried. The mixture of seed and soil was placed in common flower pots. These pots, each covered with a porous saucer, were arranged in sets and buried in the soil at Arlington Experiment Farm, Rosslyn, Va. As a result of this method, the soil within the pots when taken up has resembled, in moisture and compactness, the soil outside the pots.

In all, 32 sets of pots were buried. The trench in which the pots were buried was approximately nine feet wide at the top and 50 feet long. On one of its sides the soil was removed to a depth of eight inches; through the middle the soil was removed to a depth of 22 inches; on the other side it was removed to a depth of 42 inches.

Thus the trench had three distinct levels or

FIELD SEEDS

(Continued from Page 619)

decline of a week ago by dropping 15 cents lower. Kentucky bluegrass was in fairly active demand and prices were quite generally maintained. Canada bluegrass was quoted mostly at \$20 to \$21 or the same as the week before. Orchard grass remained somewhat sluggish. Prices advanced 15 cents in one market. Rye grass remained unchanged, with domestic selling at eight dollars. Turf and other grasses were quoted in other markets mostly as follows: Germany mixed bent, \$50 to \$67; chewings fescue, \$27.50 to \$30; sheeps fescue, \$24 to \$25; Bermuda grass, \$29 to \$30, and Bromus Inermis, \$11.50 to \$12.

The millets were mostly quiet though a trifle more interest was shown in them and other forage crops. Prices remained mostly at previous levels. Sudan grass and sorghos showed no changes. And Canada field peas, soybeans and cowpeas were quoted at immediately prevailing levels. Rapeseed demand remained fair to good, with price averages about the same as before.

Though active on call, seed grains slightly slowed down from the week despite a five cent drop in one market. Seed corn and buckwheat continued fairly quiet.

"SUN-SEED" GRADES PUBLISHED

So popular and commercially important has the sunflower seed become that Illinois grain inspectors now offer a list of official ratings for this product. Feed manufacturers and other buyers of this seed heartily endorse the move. East St. Louis, Ill., is the chief inspection point for shipments, standards for which are as follows:

No. 1 (Mammoth Russian) sunflower seed must test at least 26.5 pounds per bushel, and not over 11 per cent moisture, 2 per cent foreign material, 2 per cent damaged grains, and 3 per cent of black or wild sunflower seed.

No. 2: 23 pounds, 13 per cent moisture; 4 per cent foreign, 4 per cent damaged, and 8 per cent black. It shall be "cool, sweet, and may be stained or slightly weathered." No. 1 cannot be weathered.

No. 3: 21 pounds, 15 per cent moisture, 6 per cent foreign, 6 per cent damaged, and 12 per cent black.

Sample grade is such sunflower seeds "which do

not come within the requirements of any of the above grades or which have any objectionable foreign odor, or are heating, hot, sour, infected with live weevils or other insects injurious to stored grain, or are otherwise of distinctly low quality."

Most of the commercial movement of Illinois sunflowers is through East St. Louis and inspection is therefore made available at that point. If a demand for such seed inspection should develop at other grain inspection points, it will undoubtedly be supplied.

BANK OF LATVIA GRANTS SEED CREDIT OF \$965,000

The Council of the Bank of Latvia has decided to comply with the request of the government to finance its seed purchases, according to a report from Lee C. Morse, commercial attache at Riga. It has granted a credit of \$965,000 at 5 per cent interest per annum for one year against security of the Ministry of Finance.

The government was authorized by parliament to buy \$965,000 worth of seeds on credit, as previously reported. It was understood that the seeds would be bought from Germany which offered the seeds required against payment of 25 per cent cash at the time of delivery and a credit of two years at 7 per cent interest per annum for the balance.

However, it seems that the Latvian government has decided it is more advantageous to have its seed purchases financed by the Bank of Latvia at a lower rate of interest and buy the goods wherever price and quality is the most favorable.

NEW YORK SEEDS "BEST EVER"

By C. K. Trafton

Signs of early improvement in the seeds trade became much more pronounced as March progressed. Toward the end leading distributors of long experience declared that spring trade was the best they had ever known.

A long period of favorable weather over a wide area, coupled with the fact that the great majority of jobbers and retailers had kept stocks down to a minimum during the winter, accounted for this record-breaking movement which included practically all varieties. With seed bought months ago for early 1929 delivery already shipped out, this heavy new demand resulted in a material reduction of supplies all along the line and actually threatening a shortage of some varieties. As a consequence, holders are decidedly firm in their views, but in only two cases are prices higher than they were a month ago. Fancy Redtop is actually lower.

Alsike joined in the general activity and at this time seems to be the item most seriously threatened with an acute shortage. As a consequence there were some negotiations for European seed, but only one experimental lot of 100 bags arrived and it was not generally believed that any additional quantities of importance would be brought

NET PRICES—HIGH GRADE RUBBER BELTING NOW IN STOCK

Inch	2 ply	3 ply	4 ply	5 ply	6 ply
1	\$0.06	\$0.06	\$0.07		
1½	.07	.08	.09		
1½	.08	.09	.11	\$0.14	
2	.10	.11	.13	.16	
2½	.10	.15	.14	.18	\$0.21
3	.13	.15	.17	.21	.25
3½	.15	.17	.20	.25	.30
4	.17	.20	.23	.29	.34
4½	.19	.21	.25	.31	.37
5		.24	.28	.35	.42
6		.26	.31	.39	.46
7		.31	.37	.46	.55
8		.37	.43	.54	.65
9		.40	.46	.58	.70
10			.52	.65	.78
			.58	.72	.87

PRICES FOR WIDER BELTS AND FOR 7 TO 10 PLY ON APPLICATION

WE ALSO CARRY IN STOCK A COMPLETE LINE OF HANGERS, SHAFTING, WOOD AND STEEL PULLEYS, NEW AND USED LEATHER BELTING, MOTORS, GENERATORS, AND A FULL LINE OF MILL AND ELEVATOR SUPPLIES.

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We specialize on Fine Ground for Poultry Mashers.
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shelves, each about three feet wide, of undisturbed soil. The sets of pots were arranged on each of these shelves, eight sets on the shallow or A level, 12 sets on the middle or B level and 12 sets on the deep or C level. This arrangement made it possible to take up a set from each of the different depths by digging across the trench. After the pots were removed the earth was immediately replaced to prevent any unnecessary disturbance of the remaining sets.

ONE SET A YEAR DUG UP

The seeds upon being dug up have been tested immediately for germination in the greenhouse. The method employed for making the viability tests has been to sift the contents of each pot on a section of a greenhouse flat nearly filled with sterilized soil. Each flat was divided by partitions into four sections. This arrangement permitted the planting of the same kind of seed from each of the three depths, and a check in the same flat.

A description of the experiment and the results obtained at the end of the first year were published by Duvel who continued to supervise the experiment through the test of 1912. The viability tests of 1905, 1908, and 1912 were made by Mr. Goss, who since then has continued the experiment.

"THE SURVIVAL OF THE WORST"

Mr. Goss, in summing up the results of taking up the buried-alive seeds, calls attention to several facts:

The depth at which the seeds were buried had little effect upon the preservation of their vitality.

Cultivated plants appear to depend largely upon human agencies for their perpetuation.

None of the cereals or legumes whose seeds are used as food germinated on being dug up. The seeds of weeds or wild plants survived better than those of cultivated plants.

The weed seeds showing the highest germination and the fewest failures were all from common and persistent weeds in the locality of Arlington, Va. The docks, lambs' quarters, plantains, daisies, poke, purslane, jimson, and ragweed are examples.

Of the 107 species buried in 1902, 71 grew in 1903 after 1 year, 61 grew in 1905 after 3 years, 68 grew in 1908 after 6 years, 69 grew in 1912 after 10 years, 50 grew in 1918 after 16 years, and 51 grew in 1923 after 20 years.

WEED SEED MAY BE DOWN BUT IT'S NEVER OUT

The seeds of most weeds, when ploughed under, will not perish during the period of any normal crop rotation.

Any attempt to control weeds which have gone to seed by plowing them under is evidently futile. This conclusion does not invalidate the importance of plowing weeds under before they go to seed.

Rye, oats, wheat, corn, buckwheat, and other cereal seeds were among those subjected to burial experiment in 1902, but none of them, after being dug up, germinated after 1903.

OHIO SEED DUST FORMULA IS THREE OUNCES TO BUSHEL

About three ounces of formaldehyde dust to a bushel of oats is the anti-smut remedy recommended by the Ohio Experiment Station.

The fungi that cause smuts of oats live as internal parasites in the oat plants, J. D. Sayre, assistant plant pathologist at the Ohio Station, points out. At heading time they produce black masses of spores instead of grains. These spores cling to the outside and within the oat seeds, and start their growth along with the oat seedling which they soon enter through the delicate tissues.

Good seed cannot be told from smut infected seed. If there was any smut present in the crop before harvest the seed should be treated. Even if there

were no smut in the growing crop the grain may become infected in threshing or handling, making it advisable to treat the seed.

Many treatments have been devised, but not all are satisfactory. Some are too costly, require wetting the grain, or are likely to injure the seed. The best treatment, Dr. Sayre finds, is formaldehyde. It is cheap, does not require wetting the grain, does not injure the seed, is simple and easy to apply, is not dangerous to handle, and left-over grain may be fed, and above all it is effective.

MILWAUKEE SEED NOTES

By C. O. SKINROOD

Seed dealers report that prospects were for a very early spring with its consequent demand for seeds, but now the weather has turned very cold and wet after the warm days, and it is quite possible that spring work will not be done until later than usual. Damage from winter killing is likely to be larger.

The demand for Red Clover seed however, has started out at a very swift pace. Buying sprang up, the seed dealers report, from all corners of the Northwest. It has been so large that the supply of Red Clover seed has been practically exhausted. In addition the peak of the buying season is still to be reached, so that dealers say the supply of seeds available later on in the season is likely to be very low. Quotations are \$31.50 to \$32 for mediums; 50 cents more on mammoth.

Timothy supply is now liberal in the Milwaukee market. The supply has been coming out at a rate larger than expected. In addition to the plentiful supply, the buying of Timothy seed has been very poor all season. Predictions are made that this will be one of the most disappointing seasons in Timothy for many years. Prices are down to \$6.25 to \$6.50.

The Alsike supply has also been very largely cleaned up, the Milwaukee handlers find. It has been very popular all season, the dealers say, and has helped to trim down the available supply to a very low point. The price has been holding largely steady for the last thirty days, at \$32 to \$33.

The Sweet Clover demand for 1929 bids fair to far surpass the call for this kind of seed in any previous season. Its relatively low prices is be-

lieved to have partly accounted for the large buying demand. Stocks have been pretty well cleaned up after the strong buying demand.

The supply of alfalfa seed appears to be more plentiful than for a long time, and call for it has not been nearly as good as expected. The dealers explain this unpopularity by the very high price prevailing this season. As a result of the lack of buying the price has gone down about 50 cents in the last 30 days, ranging at \$24 to \$27 for Utah and Idaho.

There has been a sudden spurt in the demand for White Clover at \$30 to \$40, based largely on the expectation that a tariff may be levied on this seed. The price has soared from five to 10 cents on reports that the present tariff rate of three cents a pound might be raised to 15 or 18 cents.

The trade in seed corn this season has been very active, and the supply appears to be abundant. Even the Wisconsin seed corn seems to be ample and all buyers could now fill their needs from this class of seed if they care to do so despite the premium charged on it. Western corn, notably that from the Dakotas and from Nebraska, is available at \$1.80 to \$2, and Wisconsin corn is being quoted at \$3 to \$3.25.

There is little trade as yet in soy beans, these
(Continued on Page 626)

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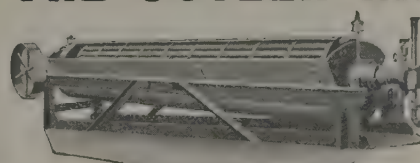
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CATALOG ON REQUEST

(Continued from Page 625)

being quoted around \$4. The Sudan grass varies from \$5.50 to \$6. The trade in late seeds is expected to be very large.

Sweet Clover is going at \$8.50 to \$9.50.

INBRED RYE SHOWS PROMISE

Sterility in certain strains of rye markedly reduces yields, according to rye breeding studies being carried on by Badger state seed experts. A most promising line of work now being pursued consists in "selfing," or inbreeding, a large number of strains of rye, and selecting those that produce seed when self fertilized.

Striking differences are showing up in these inbred lines, some plants demonstrating vigorous growth, and yielding a high percentage of seed. It is hoped to develop a variety of rye that will out-yield any of our present varieties, due to the cutting down of the number of infertile heads, which represent an important influence in depressing yields of our present commercial varieties.

FLAXSEED DUTY REPORT GIVEN TO PRESIDENT HOOVER

The Tariff Commission has concluded its work in connection with the cost of production investigation covering flaxseed and is now preparing to submit its findings to President Hoover, it was stated at the commission headquarters last week.

The President, in turn, it was explained, plans to re-submit the report to the House Committee on Ways and Means, along with the findings of the commission in other investigations involving the costs of production of corn, halibut, hosiery, fir logs, canned tomatoes and tomato paste, and window glass.

The purpose of deferring executive action on these reports was said to be due to the desire of Mr. Hoover to prevent a duplication of work which is soon to be performed by Congress in enacting a new tariff law.

WINTER WITHERS EUROPEAN SEED SOLD IN NORTHERN STATES

For a number of years A. L. Stone, Madison, Wis., has been co-operating with the United States Department of Agriculture in the testing of Red Clover seed. In the spring of 1927, 50 clover plots were seeded on the University Farm, using imported clover seed obtained directly from commercial import lots entering the United States, in comparison with seed produced on a farm near Fort Atkinson, and with Tennessee anthracnose resistant Red Clover seed which came directly from the Tennessee Experiment Station.

The winter and spring of 1927-28 were such that there was severe killing of Red Clover and Alfalfa, especially in the southern half of Wisconsin—it is probable that 75 per cent of the clover in this sec-

tion was killed. In spite of the severe conditions there was a fair stand of clover on all the plots which had been sown to domestic grown seed. The Tennessee anthracnose resistant seed produced plants which survived the winter to almost as great an extent as the Wisconsin grown.

Only an occasional clover plant survived on the plots sown to imported seed irrespective of the source. Examination showed that almost without exception the surviving plants on these plots were the hairy American type. In practically no instance did the European smooth clover survive. This emphasizes the importance of using hardy native clover seed of known origin rather than take the chance of winter killing that is always more probable when foreign grown seed is used. Canadian grown seed is as good as our own. The same cannot be said of European-grown seed.

DEALERS HELP IN SEED PEA TEST

Seed peas from stocks in use by seed dealers, as well as samples representing seed stock delivered to, and being grown by canners, are planted in comparative plots at several north-central experiment stations, and the purity and desirability of the various lots noted.

This is done each year, and has been responsible for the elimination of many inferior stocks and strains of seed peas. This work has the co-operation of most seedsmen and many canners, who obtain a clear cut understanding of the merits of their seed peas by visiting the comparative plots on the station farms.

DRILLS YIELD SEED DATA

W. G. Weir, secretary of the Manitoba Seed Improvement Association, states that results of a recent governmental survey discloses that out of 1,007 samples taken from seed drills, 677 grade "rejected" according to the purity standards of the Dominion Seeds Act. Only 76 of the samples rated as No. 1; 84 as No. 2; 170 as No. 3.

Total losses from dockage and smut, avoidable by the use of good seed, he estimates at over \$1,000,000 per year.

\$2,000,000 SEED LOAN MADE

Nearly \$2,000,000 has been advanced to South Atlantic farmers in seed loans in the storm-damaged areas, Senator George of Georgia announced this month. Appropriations for these advances were made in the last session of Congress.

The statement by Senator George follows in full text:

Senator George has been advised by Director Warburton of the Extension Service, Department of Agriculture, that from \$1,750,000 to \$2,000,000 of the Federal seed loan fund provided by Congress at the last regular session had been advanced to

farmers who suffered material damage from storms, wind, and rain, during the crop season of 1928.

The Senator was told that by far the larger part of this sum had been loaned to farmers in Georgia and South Carolina, only a few applications having thus far been received from other states.

Under the act of Congress approximately \$2,000,000 of the \$6,000,000 appropriated will be available to farmers in nearly 100 counties in Georgia. Senator George, who interested himself in this legislation from the beginning, expressed the opinion that the loans made from this fund to the farmers in the storm areas in the Southeast, including Georgia, would be of great assistance to the farmers, though he regretted that the appropriation of \$15,000,000 originally authorized by the Senate had to be reduced in order to obtain final passage and approval of the legislation.

A. S. Hunter & Co. will build a new seed cleaning plant at Durham, Ont. Their plant recently burned.

The Ed. Coe Seed Store has been opened at Boone, Iowa. It will be managed by Earl Holdridge and Raymond Knapp.

The Grafton (N. D.) Seed Company has been recently organized and will open its new business in the O'Brien building.

The Quality Seed & Produce Company has built a new warehouse at Rockwell City, Iowa, for the storage of flour and seeds.

The storage space of the Hamilton Seed & Coal Company at Cedar Rapids, Iowa, will be increased from 12,000 to 20,000 square feet.

T. J. Smith will build a new seed house this spring at Grand Forks, N. D. It will be 25 by 165 feet. The old house will be wrecked.

Noah Neuenschwander of the Rudy-Patrick Seed Company has expanded his business and moved into the Weidman building at Garden City, Mo.

A. Spurgin has installed a new seed cleaner in his plant at Columbus, Ind., for recleaning clover, timothy, wheat and soy beans for seed purposes.

Edward Shult, formerly part owner of the Ortonville (Minn.) Seed & Supply House, will open a seed and feed business under the name of Schult & Company.

The Washburn-Wilson Seed Company of Moscow, Idaho, has added to its stations the plant and equipment of the Great Western Seed Company of Bridger, Mont.

The Alfred J. Brown Seed Company has started work on the construction of an additional building to its plant at Twin Falls, Idaho, which will double its capacity. Estimated cost is \$35,000.

A modern seed grain plant, costing \$200,000, will be erected at Moose Jaw, Sask., by the Canadian government. One of its special features will be a gravity grading and handling system. The Saskatchewan Registered Seed Growers will lease the plant.

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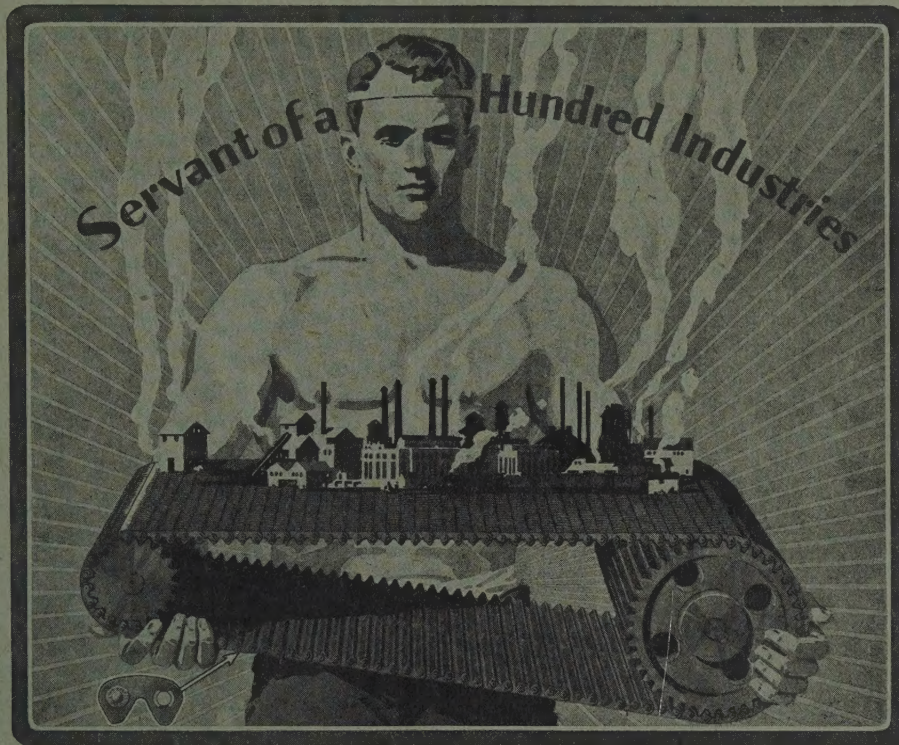
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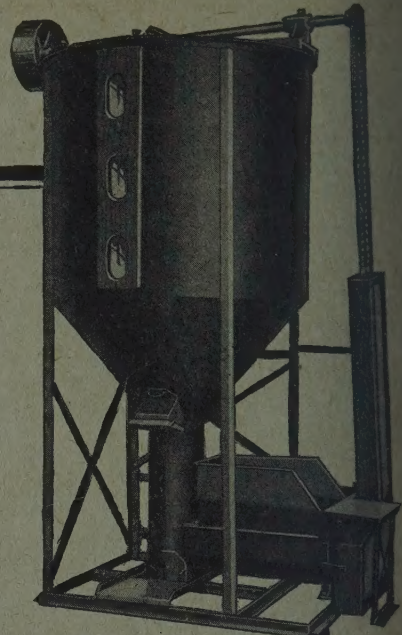
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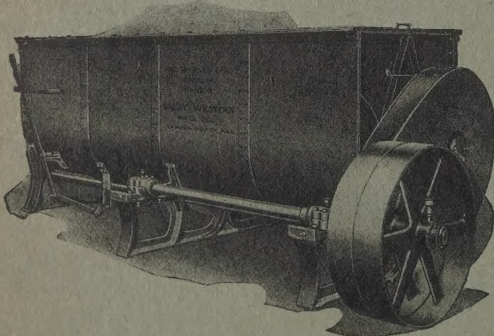
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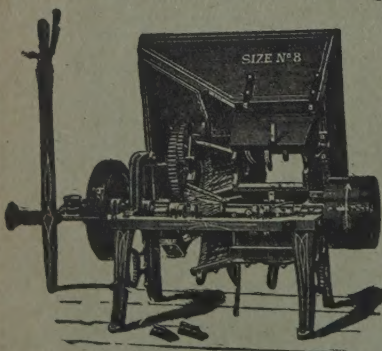


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